September 2024

West Seattle Link Extension

Final Environmental Impact Statement

EXECUTIVE SUMMARY

SOUNDTRANSIT

U.S. Department of Transportation
Federal Transit Administration

Intentionally Left Blank

SOUNDTRANSIT

September 20, 2024

Dear Recipient:

The U.S. Department of Transportation Federal Transit Administration (FTA) and Sound Transit (Central Puget Sound Regional Transit Authority) have prepared this Final Environmental Impact Statement (EIS) on the proposed West Seattle Link Extension project. Sound Transit is the project proponent. The Final EIS was prepared pursuant to the National Environmental Policy Act (42 U.S.C. 4321 to 4370e) and the State Environmental Policy Act (Ch. 43.21C Revised Code of Washington) to inform Tribes, the public, agencies, and decision makers about the environmental consequences of building and operating the West Seattle Link Extension in the city of Seattle. This Final EIS examines project alternatives, including the preferred alternative identified by the Sound Transit Board in July 2022.

The Draft EIS published for the West Seattle Link Extension in January 2022 evaluated both the West Seattle Link Extension and the Ballard Link Extension together as one West Seattle and Ballard Link Extensions Project. In July 2022, the Sound Transit Board directed that further studies be prepared for the Ballard Link Extension to evaluate additional station options and other refinements (Motion M2022-57). Some of these project options and refinements require additional conceptual engineering and environmental review. Rather than delay completion of the environmental review process for the West Seattle Link Extension while additional review is conducted for the Ballard Link Extension, Sound Transit and FTA have decided to move forward under separate environmental reviews for each extension.

As described in the Draft EIS, the West Seattle and Ballard Link extensions will operate as separate lines, and the extensions are stand-alone projects with independent utility. Proceeding with separate environmental review processes for each extension enables Sound Transit and FTA to minimize delay in delivering the West Seattle Link Extension while further studies are undertaken on the Ballard Link Extension. Accordingly, this Final EIS is for the West Seattle Link Extension only. The Ballard Link Extension will undergo separate environmental review, building on the analysis already completed.

This West Seattle Link Extension Final EIS includes responses to comments received on the West Seattle and Ballard Link Extensions Draft EIS that are specific to the West Seattle Link Extension or that would apply to both projects (See Appendix O, Draft EIS Comments). Comments specific to the Ballard Link Extension and those that apply to both projects will be responded to as part of the environmental review process for the Ballard Link Extension Project.

Major choices for the West Seattle Link Extension involve the route of the light rail line and station locations. The Sound Transit Board will consider the alternatives evaluated in the Final EIS, comments on the Draft EIS, and other information before selecting the project to be built. After the Sound Transit Board selects the project to build, FTA is expected to issue a Record of Decision, which will state FTA's decision on the project and list mitigation commitments to reduce or avoid impacts.

The printed Final EIS copies include a flash drive with appendices, technical reports, and responses to comments on the Draft EIS. The printed Final EIS Executive Summary copies include a flash drive with the main volume, appendices, technical reports and responses to comments. Please see the Final EIS Fact Sheet regarding availability of hard copies and who to contact for further information.

Sincerely,

Lauren Swift

Lauren Swift, Corridor Environmental and Business Operations Manager

Central Puget Sound Regional Transit Authority • Union Station
401 S. Jackson St., Seattle, WA 98104-2826 • Reception: (206) 398-5000 • FAX: (206) 398-5499
www.soundtransit.org

CHAIR
Dow Constantine
King County Executive

VICE CHAIR
Dave Somers
Snohomish County Executive

BOARD MEMBERS
Nancy Backus
Auburn Mayor

Claudia Balducci
King County Councilmember

Angela Birney
Redmond Mayor

Bruce Dammeier
Pierce County Executive

Cassie Franklin
Everett Mayor

Christine Frizzell
Lynnwood Mayor

Bruce Harrell
Seattle Mayor

Roger Millar
Washington State Secretary of Transportation

Ed Prince
Renton Councilmember

Kim Roscoe
Fife Mayor

Dan Strauss
Seattle Councilmember

Dave Upthegrove
King County Council Chair

Peter von Reichbauer
King County Councilmember

Kristina Walker
Tacoma Councilmember

Girmay Zahilay
King County Council Vice Chair

INTERIM
CHIEF EXECUTIVE OFFICER
Goran Sparrman

Commitment to Accessibility

The Department of Transportation is committed to ensuring that information is available in appropriate alternative formats to meet the requirements of persons who have a disability. If you require an alternative version of this file, please contact FTAWebAccessibility@dot.gov.

WEST SEATTLE LINK EXTENSION

SEATTLE, WASHINGTON

FINAL ENVIRONMENTAL IMPACT STATEMENT

Submitted pursuant to
the National Environmental Policy Act (NEPA) (42 United States Code 4322(2)(c))
and the State Environmental Policy Act (SEPA) (Ch. 43.21C Revised Code of Washington)
by the
UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION
and
CENTRAL PUGET SOUND REGIONAL TRANSIT AUTHORITY
(Sound Transit)
in cooperation with
UNITED STATES ARMY CORPS OF ENGINEERS
UNITED STATES COAST GUARD
UNITED STATES POSTAL SERVICE
PORT OF SEATTLE
CITY OF SEATTLE

8/5/2024
Date of Approval

Signed by:
Susan Fletcher
F6BB9953F95147F...
Susan Fletcher, Regional Administrator
NEPA Responsible Official
For Federal Transit Administration, Region 10

8/5/2024
Date of Approval

Signed by:
Perry Weinberg
6F2812D72BD5439...
Perry Weinberg, Deputy Executive Director
Office of Environmental Affairs and Sustainability
SEPA Responsible Official
For Sound Transit

Intentionally Left Blank

West Seattle
Link Extension

FACT SHEET

Proposed Action

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to expand Link light rail transit service along a 4.1-mile corridor from SODO to West Seattle. The West Seattle Link Extension Project (the project) would be within the city of Seattle in King County Washington, the most densely populated county of the Puget Sound region. The project would include stations at SODO, Delridge, Avalon, and Alaska Junction. The project is part of the Sound Transit 3 Plan, funding for which was approved by voters in 2016 (Sound Transit 2016).

The Final Environmental Impact Statement (EIS) evaluates multiple Build Alternatives in the project corridor, including different alignments and design options. The Final Environmental Impact Statement also includes a No Build Alternative. This allows an analysis of the potential impacts of not building the project and provides a basis for comparing the Build Alternatives to a future baseline condition. The Final EIS also includes a minimal operable segment from SODO to Delridge for analysis in the event the full project cannot be built at one time.

In 2022, the Sound Transit Board of Directors (Board) identified one preferred alternative or design option for each of the project segments. A preferred alternative is not a decision on the project to build; instead, it is a statement of preference based on currently available information. The Final EIS evaluates all alternatives, including a No Build Alternative. The Board is not bound by its identification of a preferred alternative. The Board will not make a final decision on the project to be built until after the Final EIS is issued. At that time, the Board may select from among any of the alternatives evaluated in the EIS.

Project Proponent

Central Puget Sound Regional Transit Authority (Sound Transit)
401 South Jackson Street
Seattle, WA 98104-2826
www.soundtransit.org

Dates of Construction and Opening

The West Seattle Link Extension is expected to open in 2032. When the Sound Transit Board identified alternatives for study in the Draft EIS, early cost estimates indicated that alternatives with a tunnel in West Seattle could have required additional funding; that is, funding beyond what was assumed in the Sound Transit 3 financing plan. Additional funding for these alternatives would have needed to come from contributions from partner agencies outside of Sound Transit, such as the City of Seattle or others. Since the publication of the Draft EIS, more specific cost estimates were reviewed by Sound Transit. Due to the rising price of real estate, tunnel alternatives would not necessarily cost more than elevated alternatives. However, based on current cost estimates and revenue projections, the preferred alternatives and design options for the West Seattle Link Extension are anticipated to exceed the assumptions in Sound Transit's realigned financial plan.

Sound Transit, City of Seattle, and King County acknowledge there may be shared responsibility to address the additional cost difference between the final project to be built and the realigned financial plan through either additional funding or cost-savings opportunities. As described in Sound Transit Board Motion 2023-57, the City of Seattle and King County provided letters to Sound Transit on March 23, 2023, indicating their intent to work with Sound Transit to further analyze costs and funding sources over the next year and develop funding terms in advance of the Board action to select a project to be built.

National Environmental Policy Act (NEPA) Lead Agency

Federal Transit Administration
915 2nd Avenue, Suite 3192
Seattle, Washington 98174-1002
https://www.transit.dot.gov/about/regional-offices/region-10/region-10

NEPA Responsible Official

Susan Fletcher, Regional Administrator for Region 10
Federal Transit Administration
915 2nd Avenue, Suite 3192
Seattle, Washington 98174-1002

State Environmental Policy Act (SEPA) Responsible Official

Perry Weinberg, Deputy Director, Office of Environmental Affairs and Sustainability
Sound Transit
401 South Jackson Street
Seattle, WA 98104-2826

Contacts for Additional Information

Sound Transit

Lauren Swift, Central Corridor Environmental Manager (206) 398-5301
Phoebe Wu, Community Engagement Specialist (206) 903-7128
Sound Transit
401 South Jackson Street
Seattle, WA 98104-2826

Federal Transit Administration

Mark Assam, Environmental Protection Specialist (206) 220-4465
Federal Transit Administration
915 2nd Avenue, Suite 3192
Seattle, WA 98174-1002

Anticipated Permits and Approvals

Federal

Federal Transit Administration:

- National Environmental Policy Act (NEPA) Final EIS and Record of Decision
- National Historic Preservation Act Section 106 Review
- United States Department of Transportation Act Section 4(f)
- Land and Water Conservation Fund 6(f) (if needed)

Federal Emergency Management Agency:

- Conditional Letter of Map Revision (if needed)
- Letter of Map Revision (if needed)

United States Army Corps of Engineers:

- Clean Water Act, Section 404
- Rivers and Harbors Act, Section 10
- United States Code Title 33 Section 408 Review

United States Coast Guard:

- United States Coast Guard Bridge Permit

United States Fish and Wildlife Service:

- Federal Endangered Species Review

National Oceanic and Atmospheric Administration Fisheries Service:

- Federal Endangered Species Review
- Essential Fish Habitat Review
- Marine Mammal Take Incidental Harassment Authorization (if needed)

United States Department of the Interior:

- National Historic Preservation Act Section 106 Review
- United States Department of Transportation Act Section 4(f)
- Land and Water Conservation Fund 6(f) (if needed)

State, County, and Regional

Sound Transit:

- SEPA Project Approval

Washington Department of Fish and Wildlife:

- Hydraulic Project Approval

Washington State Department of Archaeology and Historic Preservation:

- National Historic Preservation Act Section 106 Review

Washington State Department of Ecology:

- Coastal Zone Management Consistency Certification
- Dam Safety Permit (if needed)
- National Pollutant Discharge Elimination System Stormwater Discharge Permit, Clean Water Act Section 402
- Underground Storage Tank 30-day Notice
- Wastewater Discharge Permit
- Water Quality Certification: Clean Water Act Section 401

Washington State Department of Ecology and Puget Sound Clean Air Agency:

- Notice of Construction (Air Quality)

Washington State Department of Natural Resources

- Aquatic Lands Lease

Washington State Department of Transportation:

- Air Space Lease
- Utility Franchise

Washington Station Recreation and Conservation Office:

- Land and Water Conservation Fund 6(f) (if needed)

City of Seattle

- Master Use Permits
- Construction permits, such as building, grading, and demolition permits
- Environmentally Critical Area Review, including wetlands, streams, steep slopes, critical habitat, and buffers
- Shoreline Substantial Development Permits
- Noise variances for construction
- Permanent, interim, or temporary street use permits
- Access or use easements for city-owned properties
- Reviews and approvals: Planning, Design, and local Landmark Districts
- Street or alley vacations and street improvement permits, including urban forestry permits
- Revocable use permit
- Utility major permits

Utility Providers

- Pipeline and utility crossing permits
- Easements and use agreements

Principal Contributors

This EIS was prepared by consultants at the following firms: Jacobs Engineering Group, HNTB, Fehr and Peers, Heffron Transportation, Cross-Spectrum Acoustics, Michael Minor and Associates, Turner Engineering Company, Community Attributes, Irwin Writing/Editing, and EnviroIssues. See Appendix A for a detailed list of preparers.

Date of Issue of Final Environmental Impact Statement

September 20, 2024

Next Actions

Following publication of the Final EIS, the Sound Transit Board of Directors will select the West Seattle Link Extension project to build. After the Board's decision, FTA is expected to issue a Record of Decision.

Related Documents

- Final Supplemental Environmental Impact Statement, Long-Range Plan Update (Sound Transit 2014)
- Sound Transit 3 Plan (Sound Transit 2016)
- WSBLE Early Scoping Information Report (Sound Transit 2018a)
- WSBLE Early Scoping Summary Report (Sound Transit 2018b)
- WSBLE Level 1, Level 2, and Level 3 Alternatives Development reports (Sound Transit 2018c, 2018d, 2019a)
- WSBLE Scoping Information Report (Sound Transit 2019b)
- WSBLE Scoping Summary Report (Sound Transit 2019c)
- WSBLE Initial Assessment Results (Sound Transit 2019d)
- West Seattle and Ballard Link Extensions Draft Environmental Impact Statement (Sound Transit 2022)

All the above Sound Transit documents are available on the Sound Transit website, *www.soundtransit.org*.

Cost of Document and Availability for Review and/or Purchase

The Final EIS is available for public review in a variety of formats and locations. It is available on the Sound Transit website (*https://www.soundtransit.org/system-expansion/west-seattle-link-extension*) and *https://wslink.participate.online/*. It is also available on a flash drive at no cost. Paper copies are available for the cost listed below, which does not exceed the cost of reproduction:

- Executive Summary - free
- Final EIS - $25.00
- Technical Reports - $15.00 each
- Conceptual Design Drawings - $15.00

Paper copies of these documents are available for review or purchase at the Sound Transit offices, Union Station, 401 South Jackson Street, Seattle, Washington, 98104. To request any of the documents, please contact Dominique Jones at (206) 689-4783 or *Dominique.jones@soundtransit.org*. To review them, please call the Sound Transit librarian at (206) 398-5344 weekdays from 8:00 a.m. to 5:00 p.m. to arrange an appointment.

Paper and flash drive copies of the Final EIS documents are also available for review at the following public places:

- Seattle Public Libraries.
  - Beacon Hill Branch, 2821 Beacon Avenue South, Seattle, WA 98144
  - Central Library (Downtown Seattle), 1000 4th Avenue, Seattle, WA 98104
  - Columbia City Branch, 4721 Rainier Avenue South, Seattle, WA 98118
  - Delridge Branch, 5423 Delridge Way Southwest, Seattle, WA 98106
  - High Point Branch, 3411 Southwest Raymond Street, Seattle, WA 98126
  - International District Branch, 713 8th Avenue South, Seattle, WA 98104
  - New Holly Branch, 7058 32nd Avenue South, Seattle, WA 98118
  - Rainier Beach Branch, 9125 Rainier Avenue South, Seattle, WA 98118
  - Southwest Branch, 9010 35th Avenue Southwest, Seattle, WA 98126
  - West Seattle Branch, 2306 42nd Avenue Southwest, Seattle, WA 98116
- King County Libraries.
  - Burien Library, 400 Southwest 152nd Street, Burien, WA 98166
  - White Center Library, 1409 Southwest 107th Street, Seattle, WA, 98146
- Community-Based Organizations.
  - University of Washington-– Suzzallo Libraries, 4000 15th Avenue Northeast Seattle, WA 98195

Appeals

SEPA challenges to this Final EIS are governed by Sound Transit Resolution R2018-17 and the SEPA rules and regulations and Washington Administrative Code 197-11-680). Sound Transit Resolution R1018-17 is available online at: *https://www.soundtransit.org/st_sharepoint/download/sites/PRDA/FinalRecords/2018/Resolution%20R2018-17.pdf*.

As provided in Resolution R2018-17, appeals of SEPA determinations must be made in writing by filing a letter of appeal and paying the required fee within 14 days following the date the environmental document is issued under SEPA. Letters of appeal should be addressed to the Chief Executive Officer, Sound Transit, Union Station, 401 South Jackson Streeshington 98104-2826. For this Final EIS, appeals must be received by Sound Transit on or before 5:00 p.m. on October 4, 2024. Additional details about the appeals process and requirements are set out in Resolution R2018-17 and in the SEPA rules and regulations.

Table of Contents

ES.1 Introduction ES-1
ES.2 Purpose and Need ES-3
ES.2.1. Purpose of the West Seattle Link Extension Project ES-3
ES.2.2. Need for the West Seattle Link Extension Project ES-3
ES.2.3. West Seattle Link Extension Project Meets the Need ES-4
ES.3 Alternatives Considered ES-5
ES.3.1. Build Alternatives ES-5
ES.3.1.1. SODO Segment ES-6
ES.3.1.2. Duwamish Segment ES-10
ES.3.1.3. Delridge Segment ES-14
ES.3.1.4. West Seattle Junction Segment ES-22
ES.3.2. No Build Alternative ES-27
ES.4 Avoidance, Minimization, and Mitigation Measures ES-27
ES.5 Significant and Unavoidable Adverse Impacts ES-28
ES.6 Other Environmental Considerations ES-29
ES.6.1. Section 4(f) Resources ES-29
ES.6.2. Environmental Justice ES-29
ES.7 Alternative Development and Public and Agency Involvement ES-30
ES.8 Tribal Consultation ES-30
ES.9 Areas of Controversy and Issues to Be Resolved ES-31
ES.10 Next Steps ES-31
ES.11 References ES-32

List of Tables

Table ES-1. Key Environmental Impacts of the SODO Segment Alternatives ES-9
Table ES-2. Table ES-2. Key Environmental Impacts of the Duwamish Segment Alternatives ES-13
Table ES-3. Key Environmental Impacts of the Delridge Segment Alternatives ES-20
Table ES-4. Table ES-4. Key Environmental Impacts of the West Seattle Junction Segment Alternatives ES-26

List of Figures

Figure ES-1. West Seattle Link Extension Project Corridor ES-1
Figure ES-2. Link Light Rail System Expansion ES-2
Figure ES-3. Connecting the West Seattle Link Extension to Regional Link Light Rail ES-2
Figure ES-4. West Seattle Link Extension Segments and Stations ES-5
Figure ES-5. SODO Segment - Preferred At-Grade Lander Access Station Option (SODO-1c) ES-6
Figure ES-6. SODO Segment - At-Grade Alternative (SODO-1a) ES-7
Figure ES-7. SODO Segment - At-Grade South Station Option (SODO-1b) ES-7
Figure ES-8. SODO Segment - Mixed Profile Alternative (SODO-2) ES-7
Figure ES-9. SODO Segment Alternatives ES-8
Figure ES-10. Duwamish Segment - Preferred South Crossing Alternative (DUW-1a) ES-10
Figure ES-11. Duwamish Segment - South Crossing South Edge Crossing Alignment Option (DUW-1b) ES-10
Figure ES-12. Duwamish Segment - North Crossing Alternative (DUW-2) ES-10
Figure ES-13. Duwamish Segment Alternatives ES-11
Figure ES-14. Delridge Segment – Preferred Andover Street Station Lower Height South Alignment Option (DEL-6b) ES-14
Figure ES-15. Delridge Segment - Dakota Street Station Alternative (DEL-1a) ES-14
Figure ES-16. Delridge Segment - Dakota Street Station North Alignment Option (DEL-1b) ES-15
Figure ES-17. Delridge Segment - Dakota Street Station Lower Height Alternative (DEL-2a) ES-15
Figure ES-18. Delridge Segment - Dakota Street Station Lower Height North Alignment Option (DEL-2b) ES-16
Figure ES-19. Delridge Segment - Delridge Way Station Alternative (DEL-3) ES-16
Figure ES-20. Delridge Segment - Delridge Way Station Lower Height Alternative (DEL-4) ES-17
Figure ES-21. Delridge Segment - Andover Street Station Alternative (DEL-5) ES-17
Figure ES-22. Delridge Segment - Andover Street Station Lower Height Alternative (DEL-6a) ES-18
Figure ES-23. Delridge Segment - Andover Street Station Lower Height No Avalon Station Tunnel Connection Alternative (DEL-7) ES-18
Figure ES-24. Delridge Segment Alternatives ES-19
Figure ES-25. West Seattle Junction Segment - Preferred Medium Tunnel 41st Avenue Station West Entrance Station Option (WSJ-5b) ES-22
Figure ES-26. West Seattle Junction Segment - Elevated 41st/42nd Avenue Station Alternative (WSJ-1) ES-22
Figure ES-27. West Seattle Junction Segment - Elevated Fauntleroy Way Station Alternative (WSJ-2) ES-23
Figure ES-28. West Seattle Junction Segment - Tunnel 41st Avenue Station Alternative (WSJ-3a) ES-23
Figure ES-29. West Seattle Junction Segment - Tunnel 42nd Avenue Station Option (WSJ-3b) ES-23
Figure ES-30. West Seattle Junction Segment - Short Tunnel 41st Avenue Station Alternative (WSJ-4) ES-24
Figure ES-31. West Seattle Junction Segment - Medium Tunnel 41st Avenue Station Alternative (WSJ-5a) ES-24
Figure ES-32. West Seattle Junction Segment - No Avalon Station Tunnel Alternative (WSJ-6) ES-24
Figure ES-33. West Seattle Junction Segment Alternatives ES-25
Figure ES-34. Project Milestones ES-31

EXECUTIVE SUMMARY

ES.1 Introduction

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to expand Link light rail transit service from SODO to West Seattle. The West Seattle Link Extension Project (the project) is a 4.1-mile corridor in the city of Seattle in King County, Washington, the most densely populated county of the Puget Sound region (Figure ES-1). The project would include stations at SODO, Delridge, Avalon, and Alaska Junction.

Elevated light rail near Angle Lake Station

The project is part of the Sound Transit 3 Plan of regional transit system investments, funding for which was approved by voters in the region in 2016. Sound Transit and the Federal Transit Administration (FTA) worked together to prepare this Final Environmental Impact Statement (EIS) for the project. The EIS is a joint National Environmental Policy Act (NEPA) and State Environmental Policy Act (SEPA) document. FTA is the lead federal agency under NEPA, and Sound Transit is the lead agency for SEPA.

The Draft EIS published in January 2022 evaluated both the West Seattle Link Extension and the Ballard Link Extension together as one West Seattle and Ballard Link Extensions (WSBLE) Project. The extensions were evaluated together in the Draft EIS because of their location, schedule, and review efficiencies for partner agencies.

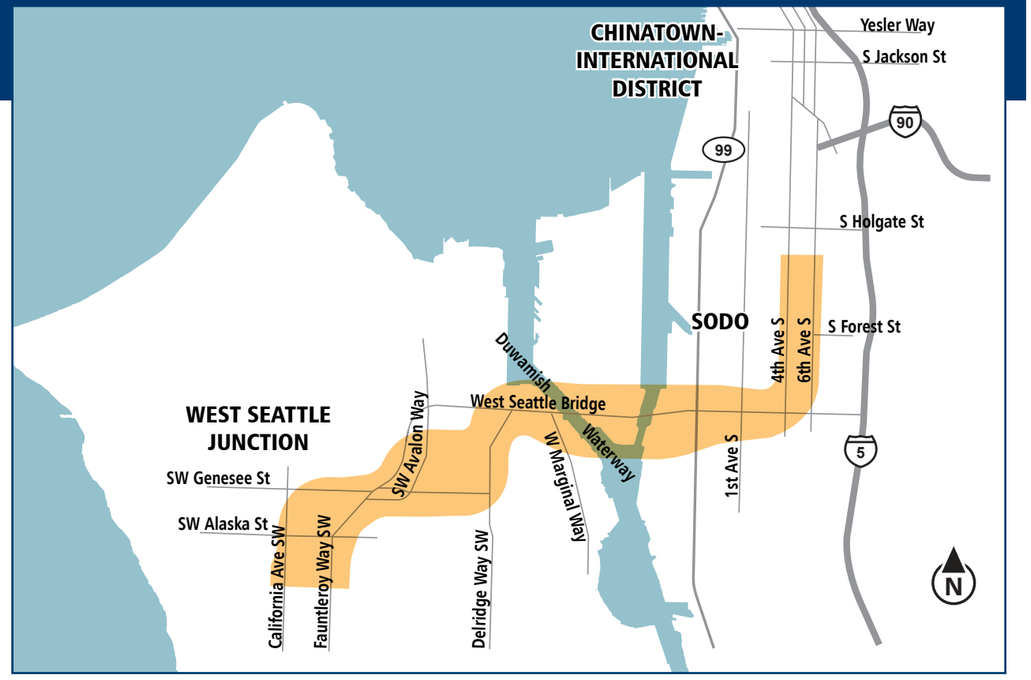
In July 2022, the Sound Transit Board of Directors (Board) directed that further studies be prepared for the Ballard Link Extension, to evaluate additional station options and other refinements (Motion M2022-57). Some of these project options and refinements require additional conceptual engineering and environmental review. Rather than delay completion of the environmental review process for the West Seattle Link Extension while additional review is conducted for the Ballard Link Extension, Sound Transit and FTA have decided to move forward with separate environmental reviews for each extension.

As described in the Draft EIS, the two extensions will operate as separate lines, and the extensions are standalone projects with independent utility. Proceeding with separate environmental review processes for each extension enables Sound Transit and FTA to minimize delay in delivering the West Seattle Link Extension while further studies are undertaken on the Ballard Link Extension. Accordingly, this Final EIS is for the West Seattle Link Extension only. The Ballard Link Extension will undergo separate environmental review, building on the analysis that has already been completed.

Puget Sound Regional Council

Puget Sound Regional Council, the regional metropolitan planning organization, develops policies and coordinates decisions about regional growth, transportation, and economic development planning within King, Kitsap, Pierce, and Snohomish counties. Puget Sound Regional Council is composed of over 80 jurisdictions, including all four counties; cities and towns; ports; state and local transportation agencies; and Tribal governments within the region.

Figure ES-1. West Seattle Link Extension Project Corridor



This West Seattle Link Extension Final EIS includes responses to comments received on the West Seattle and Ballard Link Extensions Draft EIS that are specific to the West Seattle Link Extension or that would apply to both projects (see Appendix O, Draft EIS Comment Summary and Response to Comments). Comments specific to the Ballard Link Extension as well as those that apply to both projects will be responded to as part of the environmental review process for the Ballard Link Extension Project.

The West Seattle Link Extension project would provide fast, frequent, and reliable light rail in Seattle and connect dense residential and job centers throughout the Puget Sound region. The Puget Sound Regional Council (the regional metropolitan planning organization) and the City of Seattle have designated the following Manufacturing/Industrial center and urban village in the project corridor:

- **Manufacturing/Industrial Center.** The project corridor includes the Duwamish Manufacturing/ Industrial Center. SODO Station is in the Duwamish Manufacturing/Industrial Center.
- **Urban Village.** West Seattle Junction is a neighborhood in the project corridor designated by the City of Seattle as a hub urban village. The West Seattle Junction and Avalon stations would be in the West Seattle Junction Hub Urban Village.

These designations indicate that these areas will continue to increase in residential and/or employment density over the next 30 years.

Regional transit service in the project corridor includes regional bus service, ferry service, light rail, Sounder commuter rail, and Amtrak passenger rail service. The existing 1 Line light rail currently operates between the Angle Lake Station in the city of SeaTac and the Northgate Station in Seattle, traveling through the Downtown Seattle Transit Tunnel. There is an existing light rail station in SODO in the West Seattle Link Extension corridor.

Extensions of light rail are under construction north to Lynnwood, east to Bellevue and Redmond, and south to Federal Way, all of which are expected to begin operation by 2026. Additional planned light rail extensions would continue south to the Tacoma Dome, expected to begin service in 2035, and north to Everett, planned to begin service between 2037 and 2041. The Ballard Link Extension is scheduled to begin service between SODO and Ballard in 2039. Figure ES-2 shows the full system planned for operation in 2042. The West Seattle Link Extension is scheduled to open in 2032 and would include a new SODO Station where riders to and from West Seattle could transfer at the existing SODO Station to the 1 Line until the Ballard Link Extension begins operation. The Ballard Link Extension would permanently connect the West Seattle Link Extension to the existing 1 Line, allowing riders traveling from West Seattle to continue north to Everett without a transfer. Figure ES-3 shows how the West Seattle Link Extension would connect to the regional Link light rail system.

Figure ES-2. Link Light Rail System Expansion

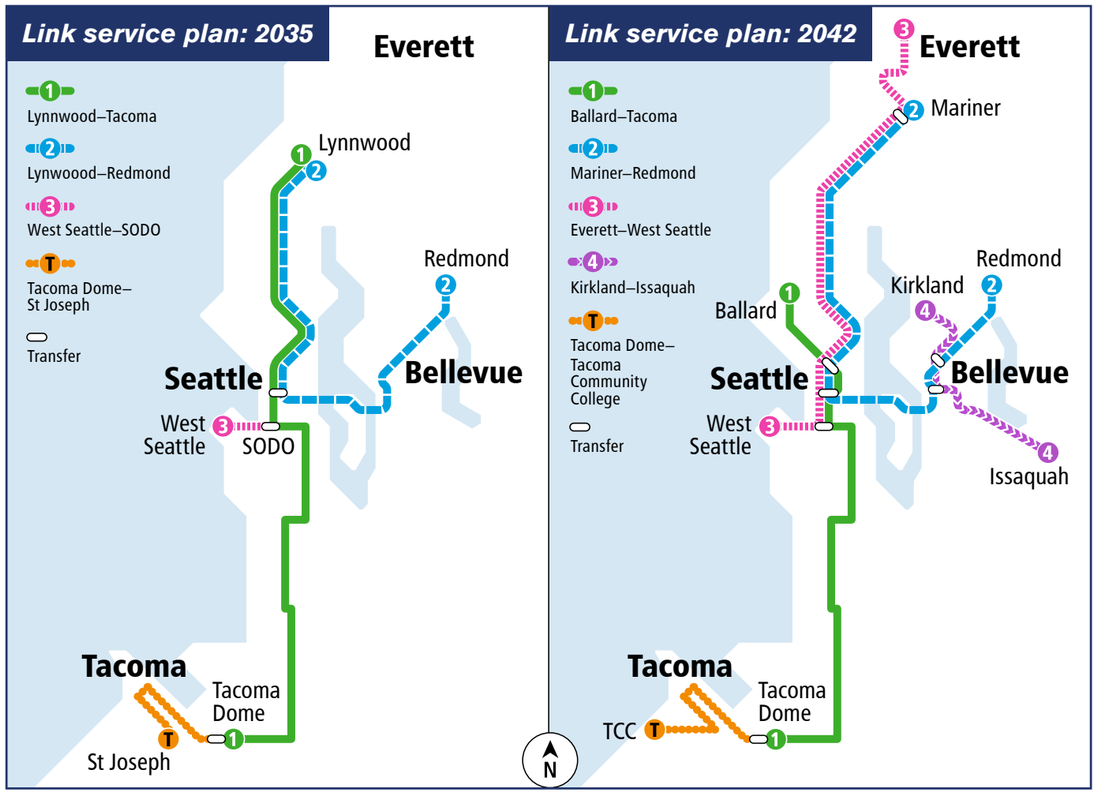
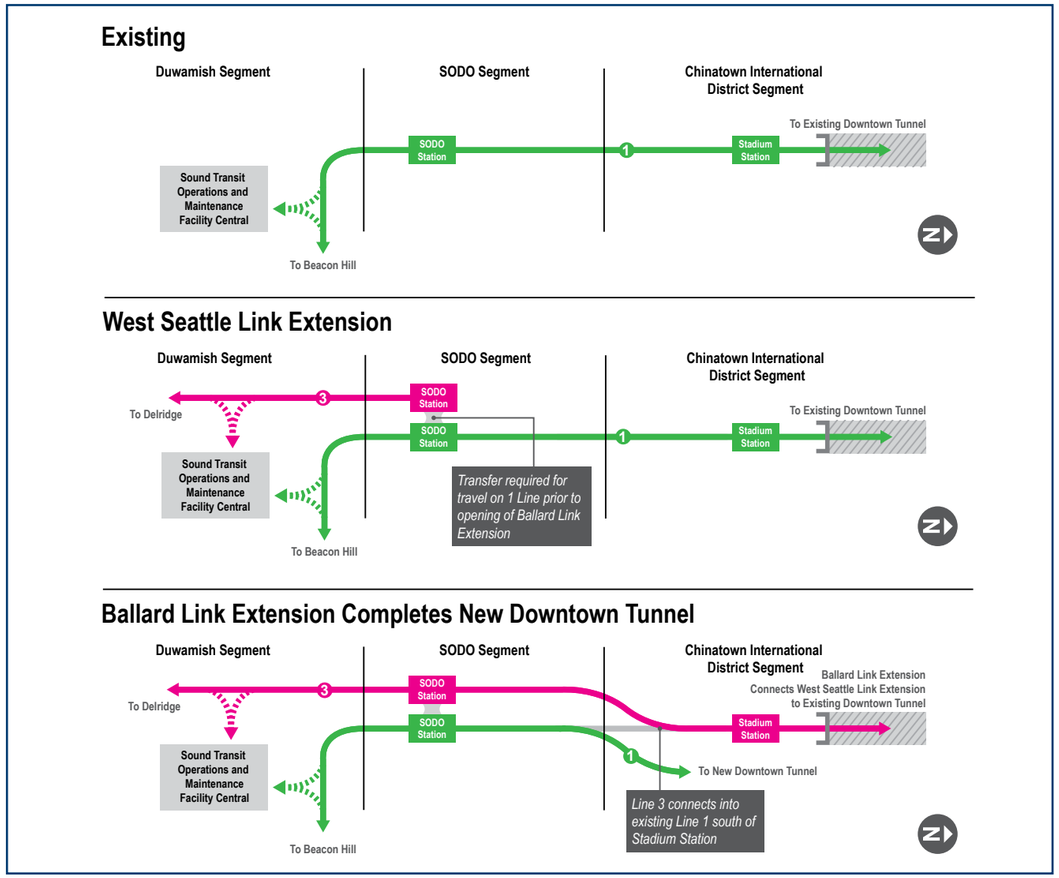


Figure ES-3. Connecting the West Seattle Link Extension to Regional Link Light Rail


Existing
Duwamish Segment
SODO Segment
Chinatown International District Segment
To Existing Downtown Tunnel
SODO Station
Stadium Station
Sound Transit Operations and Maintenance Facility Central
To Beacon Hill
West Seattle Link Extension
Duwamish Segment
SODO Segment
Chinatown International District Segment
To Existing Downtown Tunnel
To Delridge
SODO Station
SODO Station
Stadium Station
Sound Transit Operations and Maintenance Facility Central
Transfer required for travel on 1 Line prior to opening of Ballard Link Extension
To Beacon Hill
Ballard Link Extension Completes New Downtown Tunnel
Duwamish Segment
SODO Segment
Chinatown International District Segment
Ballard Link Extension Connects West Seattle Link Extension to Existing Downtown Tunnel
To Delridge
SODO Station
SODO Station
Stadium Station
To New Downtown Tunnel
Sound Transit Operations and Maintenance Facility Central
Line 3 connects into existing Line 1 south of Stadium Station
To Beacon Hill

ES.2 Purpose and Need

ES.2.1. Purpose of the West Seattle Link Extension Project

The purpose of the West Seattle Link Extension is to expand the Sound Transit Link light rail system from SODO to West Seattle, to make appropriate community investments to improve mobility, and to increase capacity and connectivity for regional connections in order to achieve the following:

- Provide high-quality, rapid, reliable, and efficient light rail transit service to communities in the project corridor as defined through the local planning process and reflected in the Sound Transit 3 Plan (Sound Transit 2016).
- Improve regional mobility by increasing connectivity and capacity through Downtown Seattle to meet the projected transit demand.
- Connect regional centers as described in adopted regional and local land use, transportation, and economic development plans and Sound Transit's *Regional Transit Long-Range Plan* (Sound Transit 2014b).
- Implement a system that is technically and financially feasible to build, operate, and maintain.
- Expand mobility for the corridor and the region's residents, which include transit-dependent people, low-income people, and communities of color.
- Encourage equitable and sustainable urban growth in station areas through support of transit-oriented development and multi-modal integration in a manner that is consistent with local land use plans and policies, including Sound Transit's Adopting an Equitable Transit Oriented Development Policy (Sound Transit 2018e) and sustainability plan (Sound Transit 2019e).
- Encourage convenient and safe non-motorized access to stations, such as bicycle and pedestrian connections, consistent with Sound Transit's *System Access Policy* (Sound Transit 2013).
- Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built, and social environments through sustainable practices.

ES.2.2. Need for the West Seattle Link Extension Project

The following conditions within the project corridor demonstrate the need for the West Seattle Link Extension Project:

- When measured using national standards, existing transit routes between Downtown Seattle and West Seattle currently operate with poor reliability. Roadway congestion in the project corridor will continue to degrade transit performance and reliability as the city is expected to add approximately 287,000 people and 214,000 jobs between 2018 and 2050 (Puget Sound Regional Council 2023).
- Increased ridership from regional population and employment growth[1] will increase operational frequency in the existing Downtown Seattle Transit Tunnel, requiring additional tunnel capacity.
- Puget Sound Regional Council (the regional metropolitan planning organization) and local plans call for high-capacity transit in the corridor consistent with VISION 2050 (Puget Sound Regional Council 2020) and the *Regional Transit Long-Range Plan* (Sound Transit 2014b).

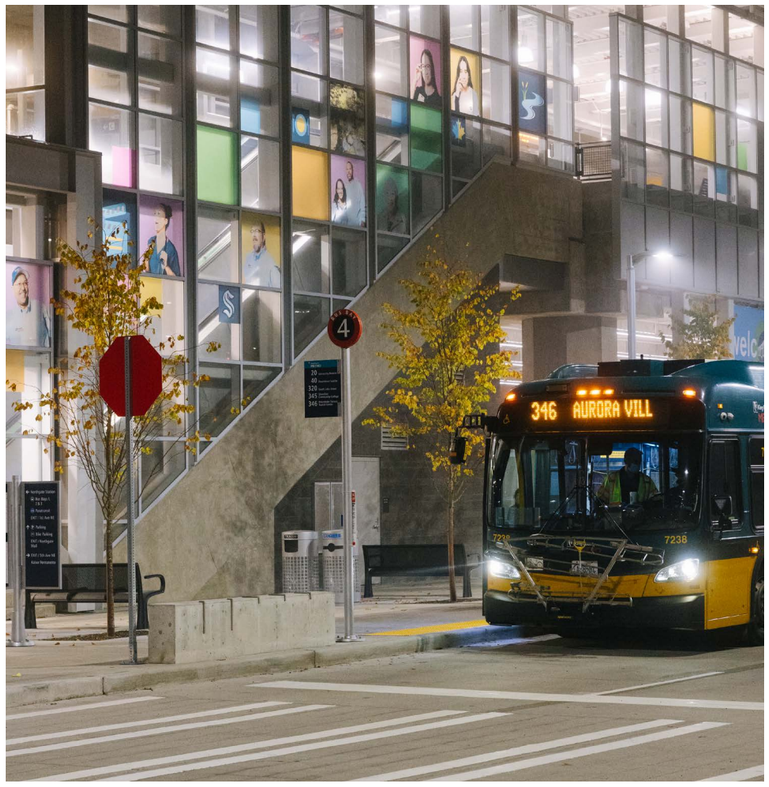
VISION 2050 on COVID-19 and the Continuing Importance of Transit

Over the last decade, transit ridership has experienced robust growth, with the central Puget Sound region being one of only four regions across the country with consistent growth in transit boardings. While COVID-19 has caused sudden and dramatic drops in transit ridership and revenue and has perhaps accelerated the acceptance of remote work environments, transit will continue to be a critical element for mobility as the region grows over the next 30 years.

The region's historic investment in transit, and continued investments across modes, are critical due to the increases in congestion and travel delay seen in the region over the past decade. Since 2010, the region has grown by over 440,000 residents and 381,000 jobs. Prior to the COVID-19 pandemic, delay on the region's freeway corridors had increased more than 50 percent since 2014, and the average travel time to work had continued to steadily increase across all modes, averaging around 30 minutes. Notably, the share of commuters with travel times over 60 minutes increased steeply and was higher than the share of commuters with travel times less than 10 minutes.

- The region's people and communities, including transit-dependent people, low-income people, and communities of color, need long-term regional mobility and multi-modal connectivity as called for in the Washington State Growth Management Act (Revised Code of Washington 36.70A.108).
- Regional and local plans call for increased residential and/or employment density at and around high-capacity transit stations, and increased options for multi-modal access. VISION 2050 has a goal for 65 percent of the region's population and 75 percent of the region's employment to occur in the regional growth centers and within walking distance of transit.
- Environmental and sustainability goals of the state and region, as established in Washington state law and embodied in Puget Sound Regional Council's VISION 2050 and 2022-2050 Regional Transportation Plan (2022), include reducing greenhouse gas emissions by prioritizing transportation investments that decrease vehicle miles traveled.

Bus transfer area at Northgate Station



1 Puget Sound Regional Council's VISION 2050 anticipates population and employment in the Puget Sound region will continue to grow over the next 30 years. The current long-range growth forecasts from Puget Sound Regional Council inform elements of the Final EIS analyses, such as ridership forecasts, projected vehicle trips, and non-motorized activities. Puget Sound Regional Council acknowledges that the COVID-19 pandemic could alter long-range forecasts, but considerable growth is still projected over the next several decades. This Final EIS uses the Puget Sound Regional Council forecasts adopted at the time the analysis was completed. Since that time, Puget Sound Regional Council has released updated forecasts that project even higher growth along the West Seattle Link Extension corridor by 2042.

ES.2.3. West Seattle Link Extension Project Meets the Need

Core Riders

Core ridership refers to transit-dependent people including essential workers, service workers, and those reliant on transit as their main mode of transportation. These are often people of color and/or low income.

Seattle has experienced unprecedented growth over the past two decades. As a result, rapid population and job growth has strained transportation resources in the West Seattle Link Extension corridor. Because of the projected population and employment growth and the limitations on expanding the capacity of the surface transportation network due to limited right-of-way, topography, and natural barriers, there is a need for future investments in high-capacity transit systems to serve future transit needs in the project corridor.

The greater Seattle region is one of the top metropolitan areas for rapid population growth in the United States (Howarth 2023). According to the United States Census Bureau, the population of King County grew by 16.8 percent from 2010 to 2019, while the population of the Seattle metropolitan area increased by 15.4 percent during the same time (United States Census Bureau 2010, 2019). In addition to experiencing unprecedented population growth, King County and Seattle are both net importers of workers, meaning that these jurisdictions have more jobs than workers who live in them. From a transportation perspective, this means that a large number of workers travel from cities and counties outside Seattle and King County to jobs in the county and/or city. Under the No Build Alternative, the Seattle surface transit system would continue to struggle to accommodate more growth because of roadway congestion and the difficulty in acquiring new right-of-way for dedicated transit infrastructure. The West Seattle Link Extension is expected to alleviate the constrained bus network capacity within the corridor and allow for passengers to sit. Existing p.m. peak hour transit travel times from downtown to West Seattle are 22 minutes and are expected to increase to 30 minutes by 2042 as traffic congestion in the region grows. With the West Seattle Link Extension, this would improve by 14 minutes, or 47 percent. Furthermore, transit travel time reliability would greatly improve from unreliable under existing conditions to reliable service on the exclusive light rail right-of-way. The key role of this corridor in linking communities and activity centers has led King County Metro Transit (Metro), the operator of most buses in the corridor, to identify it as a target for service growth (Metro 2022).

Currently, Interstate 5, State Route 99, and main arterial streets suffer from chronic congestion, even outside of peak travel periods. Without the West Seattle Link Extension, increasing roadway congestion will further degrade transit performance and reliability in the project corridor. The surface transit system would continue to struggle to accommodate more growth. Most roadways in the project corridor cannot be expanded to accommodate the increasing demand for dedicated transit infrastructure without substantial property acquisitions because of limited right-of-way.

West Seattle is an important access point to the city of Seattle from more affordable areas south of the project corridor such as High Point, Highland Park, and the unincorporated King County neighborhood of White Center. These communities were identified as containing environmental justice populations during the City of Seattle's Racial Equity Toolkit (RET) process. The project's Delridge Station, Avalon Station, or Alaska Junction Station would be a transit access or transfer point for people in these communities traveling to or through downtown to access regional education, employment, and activity centers.

As an additional burden to low-income populations, transportation costs continue to rise. Tolls are being implemented on major freeways in the region, such as State Routes 99, 520, and 167 and Interstate 405. While the price of fuel fluctuates, it generally increases over time. Parking in the downtown core of Seattle is also a substantial transportation cost. During a typical workday, parking costs range from about $15 per day to about $35 per day. All these expenses increase burdens on low-income residents and impede access to employment, educational opportunities, and health-care services. Effective transit can help avoid or reduce the expense of automobile ownership and provide critical access to economic opportunity for disadvantaged populations. Sound Transit considers many riders for whom these costs would be a burden to be core riders.

The project would improve access to employment and educational opportunities for all populations. The West Seattle Link Extension Project would provide regional light rail connections to large education and employment centers such as Downtown Seattle, the University of Washington, Northgate, Bellevue, Redmond, and SeaTac Airport. The project would provide light rail access to Seattle professional sports stadiums such as Lumen Field; which hosts the Seattle Seahawks football team, the Seattle Sea Dragons football team, the OL Reign soccer team, and the Seattle Sounders FC soccer team; and T-Mobile Park, which hosts the Seattle Mariners baseball team. These venues also host other large events throughout the year. The project would also improve access to Downtown Seattle's Westlake area, which is a principal shopping area; the Seattle Convention Center; and Seattle Center, which hosts arts organizations and cultural events throughout the year, and to Climate Pledge Arena, which hosts the Seattle Kraken hockey team and the Seattle Storm basketball team.

West Seattle is a peninsula, geographically isolated from the rest of the city of Seattle. The 2.5-year West Seattle Bridge closure between March 2020 and September 2022 due to safety concerns has highlighted the need for transportation redundancy to get to and from West Seattle. The repaired West Seattle Bridge is not a permanent solution and is anticipated to be replaced by 2060. An alternative route and/or method of transportation on and off the peninsula would likely be necessary to provide access from West Seattle and points south to regional education, employment, and activity centers.

The West Seattle Link Extension is expected to reduce dependency on single-occupancy vehicles, slow down growth in vehicle miles traveled, conserve energy, and reduce greenhouse gas emissions. The project is anticipated to reduce daily vehicle miles traveled by approximately 17,000 by 2042, helping to achieve Washington state's greenhouse gas emissions goals. Washington state law sets goals to decrease the annual per capita vehicle miles traveled by 30 percent by 2035 and 50 percent by 2050.

FTA and Sound Transit acknowledge the current impacts of the recent social response to the Coronavirus (COVID-19) and the resulting decline in travel demand that began in March 2020. At this time, it is impossible to predict future changes to the project purpose and need, schedule, and impacts that may result from a COVID-19 response of an unpredictable nature and length. Should substantial changes in the planning assumptions, project schedule, project scope, or surrounding project environment result because of a prolonged COVID-19 response, FTA and Sound Transit will consider additional project evaluation and public input consistent with NEPA and SEPA.

Entrance to underground U District Station

ES.3 Alternatives Considered

This Final EIS compares the environmental effects of the Build Alternatives (light rail) for the project and a No Build Alternative, which considers the transportation system and the environment as they would exist if the project was not built. The No Build Alternative also provides a baseline against which to measure the impacts of the Build Alternatives. The alternatives were defined by the Sound Transit Board after early scoping, the Alternatives Development process, scoping, and public and agency input, and comments on the WSBLE Draft EIS, which considered a wide range of alternatives.

Preferred Alternative

A preferred alternative is a statement of preference for alternatives based on currently available information. It is not a decision on the project to build.

In 2022, after publication of the Draft EIS and review of Tribal, Tribal organization, agency, and public comments, including those that suggested new or modified alternatives, the Board confirmed or modified the preferred alternative to be studied in the Final EIS and directed staff to study refinements (Motion M2022-57). The refinements to be studied were intended to enhance station access, prioritize an integrated and well-designed transfer experience from buses to light rail, and address concerns over potential displacements of organizations serving low-income populations and communities of color. Specific direction from the Board included the following:

- In the SODO Segment, explore opportunities to enhance access from the platform to South Lander Street at the SODO Station.
- In the Delridge Segment, explore opportunities to provide access north and south of Southwest Andover Street at the Delridge Station, including a pedestrian bridge across Southwest Andover Street or shifting the alignment south towards Southwest Yancy Street west of the station.
- In the West Seattle Junction Segment, explore the option to shift a station entrance to 42nd Avenue Southwest at the Alaska Junction Station.

In addition, the Board directed staff to further study the following potential cost-savings concept:

- In the West Seattle Junction Segment, eliminate the Avalon Station.

Based on this direction, alternatives and design options refining some of the alternatives evaluated in the Draft EIS were added for study in the Final EIS. Preferred Option SODO-1c was added as a refinement to Draft EIS Alternative SODO-1a to enhance access from South Lander Street. In the Delridge Segment, Preferred Option DEL-6b was added as a refinement to Draft EIS Alternative DEL-6 (now Alternative DEL-6a) to provide better access opportunities and minimize displacements associated with a behavioral health facility. Alternative DEL-7 and Alternative WSJ-6 were added to eliminate the Avalon Station for consideration as a cost-savings measure. In the West Seattle Junction Segment, Preferred Option WSJ-5b was added as a refinement to Draft EIS Alternative WSJ-5 (now Alternative WSJ-5a) to shift the Alaska Junction Station entrance closer to 42nd Avenue Southwest.

The Board will not make a final decision on the project to be built until after completion of the Final EIS. At that time, the Board can select from any of the alternatives in the EIS.

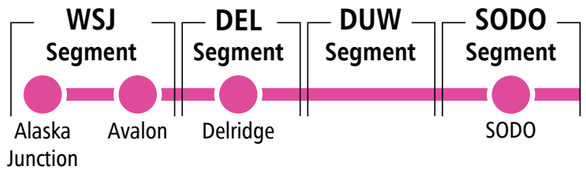
Cost estimates reflect increased project costs due to steeply rising real estate prices and construction-related expenses, as well as costs resulting from more advanced design that provides a better understanding of project scope and potential mitigation. To ensure that funding remains available to complete all voter-approved projects, the Board conducted a realignment process in 2021 that established an affordable schedule, using current financial projections and cost estimates to set the general order in which projects will advance. This affordable schedule established an approach to prioritize, fund, and manage program work over time (Resolution 2021-05). In addition, the Board adopted a target schedule as close to the Sound Transit 3 Plan schedules as possible for priority projects, reliant upon reductions in the affordability gap. To reduce the affordability gap, Sound Transit will pursue expanded financial capacity (Motion M2020-37), develop and implement a cost-savings plan, identify cost savings for the Sound Transit budget outside of the capital program, identify opportunities to reduce cost and planning delays, and engage project stakeholders in discussions to address the trade-offs between project scope, schedule, and new financial resources to inform Board decision-making on project schedule.

Based on realignment, the West Seattle Link Extension would begin operations in 2032 under both the affordable and the target schedule. The affordable schedule could implement the West Seattle Minimum Operable Segment (M.O.S.), as described in Section ES 3.1, Build Alternatives.

ES.3.1. Build Alternatives

This section describes the Build Alternatives (and design options) for the project. The project is broken into four smaller geographic areas: the SODO, Duwamish, Delridge, and West Seattle Junction segments (Figure ES-4). The light rail alternatives include elevated, at-grade, retained cut, and tunnel profiles and stations.

Figure ES-4. West Seattle Link Extension Segments and Stations



The West Seattle Link Extension would start service in 2032, providing service between a new SODO Station and an Alaska Junction Station. In 2039, as part of the Ballard Link Extension, which would construct a new downtown tunnel, the West Seattle Link Extension will be connected to the existing Downtown Seattle Transit Tunnel north of the new SODO Station, with service continuing north to the University of Washington, Northgate, Lynnwood (2024), and Everett (2037 to 2041) (Figure ES-2). More information on the alternatives and design options and how they connect can be found in Section 2.1, Build Alternatives, of Chapter 2, Alternatives Considered.

The West Seattle Link Extension (Figure ES-1) would begin south of South Holgate Street and include a new SODO Station that would allow for transfers with the existing SODO Station on the existing Link light rail line. The West Seattle Link Extension would travel south from the SODO Station across South Lander Street either at-grade or on an elevated guideway and continue south from south of South Lander Street towards South Spokane Street on an elevated guideway. In the vicinity of South Spokane Street, it would turn west on an elevated guideway either on the north or south side of the West Seattle Bridge, where it would cross the

Numbering West Seattle Link Extension Project Alternatives and Design Options

Project alternatives are designated by segment. The West Seattle Link Extension has four segments and corresponding abbreviations: SODO (SODO), Duwamish (DUW), Delridge (DEL), and West Seattle Junction (WSJ). Each alternative is designated by segment, name, and number, which describe the location and nature of the alternative. Some alternatives have design options and use the letter “a” to identify the alternative and the letter “b” or “c” to identify the design option. For example, the At-Grade Alternative (SODO-1a) is the alternative, and the At-Grade South Station Option (SODO-1b) and Preferred At-Grade Lander Access Station Option (SODO-1c) are the design options for that alternative. The project includes design options for alignments and stations. An alignment option refers to a different profile or location of a portion of the alternative. Station options include alternative locations for stations, but the options for a station generally would have the same station characteristics and serve the same population. This chapter distinguishes between alternatives and design options, but other chapters of the Final EIS use the general term “alternatives” which includes alternatives and design options unless referring to a specific alternative or option.

Duwamish Waterway (also known as the Duwamish River) on a light-rail-only, high-level fixed bridge structure. On the west side of the Duwamish Waterway, the guideway would remain mostly elevated to the west side of the Delridge valley. In the West Seattle Junction area, the guideway could be elevated or below ground. Up to three stations would be constructed in West Seattle: Delridge, Avalon, and Alaska Junction. The Delridge Station would be elevated, and the Avalon and Alaska Junction stations could be elevated or below ground. There is one alternative in West Seattle that does not include the Avalon Station. This alternative was added for study at the direction of the Sound Transit Board as a potential cost-savings measure (Motion M2022-57).

The West Seattle Link Extension minimum operable segment (M.O.S.) consists of the West Seattle Link Extension from just north of the proposed new SODO Station to the Delridge Station. This M.O.S. can be applied to all of the project alternatives and design options.

Minimum Operable Segment

A minimum operable segment (M.O.S.) is defined by the Federal Transit Administration as "a segment of the Locally Preferred Alternative that provides the most cost-effective solution with the greatest benefits for the project. The M.O.S. must be able to function as a standalone project and not be dependent on any future segments being constructed" (FTA 2008). The end-of-line station under an M.O.S. is also considered an interim terminus because it is assumed that the project would be fully built out at a later date.

The tail tracks for the M.O.S. would extend approximately 500 feet southwest of Delridge Station. Additional bus stops and bus layover spaces would be needed at Delridge Station either onsite or on local streets to accommodate additional transit connections needed at the Delridge Station. A track connection to the existing Operations and Maintenance Facility Central in SODO is also assumed as part of the M.O.S. The Delridge Station was identified as the M.O.S. because it would be the first station in the West Seattle area and would provide an opportunity for transit integration to connect areas to the south (White Center and Burien), as well as the rest of the West Seattle peninsula. The Avalon Station is not a potential terminus, as it would have added cost for construction of the guideway and station without substantially increasing ridership. See Chapter 2 for additional information.

The following sections describe the alternatives and design options for the project by segment. The West Seattle Link Extension has a total of 16 alternatives (several of which have design options), and 4 of the alternatives or design options are preferred. As not all alternatives can connect to every alternative in adjacent segments due to variations in the alignment and profile of the alternatives, possible connections are identified. Figures ES-5 through ES-8, ES-10 through ES-12, ES-14 through ES-23, and ES-25 through ES-32, which appear in the sections below, show the alternatives and design options along with their connections with alternatives in adjacent segments. The pink color is used for the Preferred Alternative, and blue is used for other alternatives. These figures also show the alternatives in plan view and in profile view.

The following sections also summarize the potential key environmental impacts of the alternatives. More detailed information about the impacts associated with each of the alternatives can be found in Chapter 3, Transportation Environment and Consequences, and Chapter 4, Affected Environment and Environmental Consequences.

ES.3.1.1. SODO Segment

The SODO Segment includes the area between approximately South Massachusetts Street and South Forest Street in the SODO neighborhood within the Duwamish Manufacturing/Industrial Center. There are two alternatives and two design options, all of which follow the SODO Busway. One alternative and all design options are at-grade and transition into a retained cut. The other alternative is elevated, transitioning to at-grade.

There is an existing SODO light rail station, and a new SODO station is the only station proposed in this segment. The new SODO Station would provide a transfer point to/from the 1 Line (future light rail line between Ballard and Tacoma) via the existing SODO Station, and the two stations would therefore function as one SODO Station. Until the Ballard Link Extension is operational, riders from West Seattle would need to disembark at the SODO Station and transfer to the existing 1 Line to travel north to Lynnwood or south to Tacoma or use another mode to reach their destination. One alternative and one design option include relocation of the existing SODO Station. All SODO alternatives include relocation of 230-kilovolt power lines from the SODO Busway to 6th Avenue South between South Massachusetts Street and the Duwamish Segment boundary. Figure ES-9 shows the alternatives and design options side by side.

Figure ES-5. SODO Segment - Preferred At-Grade Lander Access Station Option (SODO-1c)

Preferred At-Grade Lander Access Station Option (SODO-1c)

Alignment: The West Seattle Link Extension would begin just north of the existing SODO Station and travel at-grade west of Wand parallel to the existing Link light rail line replacing the SODO Busway. It would continue south at-grade under South Lander Street, which would be reconstructed as an overpass over the new and existing light rail. It would transition to an elevated guideway south of South Lander Street.

Station: New SODO Station: At-grade, immediately west of the existing SODO Station.

Preferred Option SODO-1c has a staggered station that was developed to avoid property owned by the United States Postal Service at 4th Avenue South and South Lander Street. This property is the location of the Carrier Annex and Distribution Center/Terminal Post Office (Carrier Annex/Terminal Post Office). The station features a narrowed center platform and staggered side platforms, with the southbound platform shifted slightly north so that it is not on the Carrier Annex/Terminal Post Office property. The existing driveway at the Carrier Annex/Terminal Post Office facility's southern access point would be connected under the new South Lander Street overpass to 4th Avenue South, which then maintains access to South Lander Street.

The existing at-grade pedestrian crossing of the light rail tracks at SODO Station would be closed, and a new pedestrian grade-separated crossing of both existing and new tracks would be used to access both stations. Access would also be provided at South Lander Street.

Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-6. SODO Segment - At-Grade Alternative (SODO-1a)

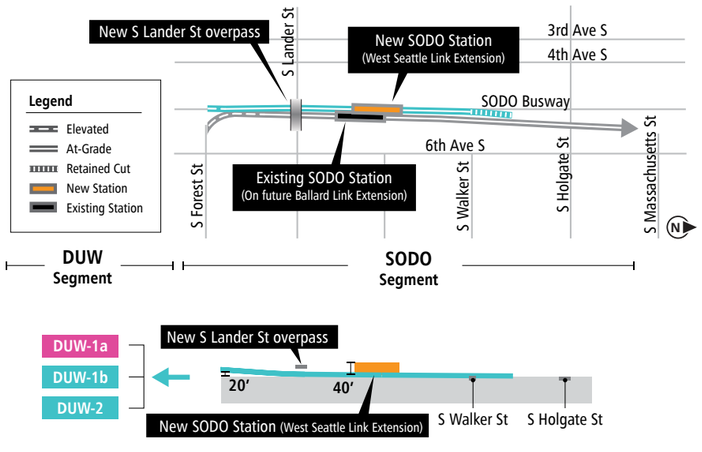
At-Grade Alternative (SODO-1a)

Alignment: Same as Preferred Option SODO-1c. The West Seattle Link Extension would begin just north of the existing SODO Station and travel at-grade west of and parallel to the existing Link light rail line replacing the SODO Busway. It would continue south at-grade under South Lander Street, which would be reconstructed as an overpass over the new and existing light rail. It would transition to an elevated guideway south of South Lander Street.

Station: New SODO Station: At-grade, west of the existing SODO Station.

Similar to Preferred Option SODO-1c. Alternative SODO-1a has a staggered station that was developed to avoid the United States Postal Service Carrier Annex/Terminal Post Office at 4th Avenue South and South Lander Street. The staggered station features a narrowed center platform and staggered side platforms, with the southbound platform shifted slightly north so that it is not on the Carrier Annex/Terminal Post Office property. The existing driveway at the Carrier Annex/Terminal Post Office facility's southern access point would be connected under the new South Lander Street overpass to 4th Avenue South, which then maintains access to South Lander Street.

The existing at-grade pedestrian crossing of the light rail tracks at SODO Station would be closed, and a new grade-separated pedestrian crossing of both existing and new tracks would be used to access both stations. South Stacy Street would be extended from 4th Avenue South to a cul-de-sac on the west side of the station.



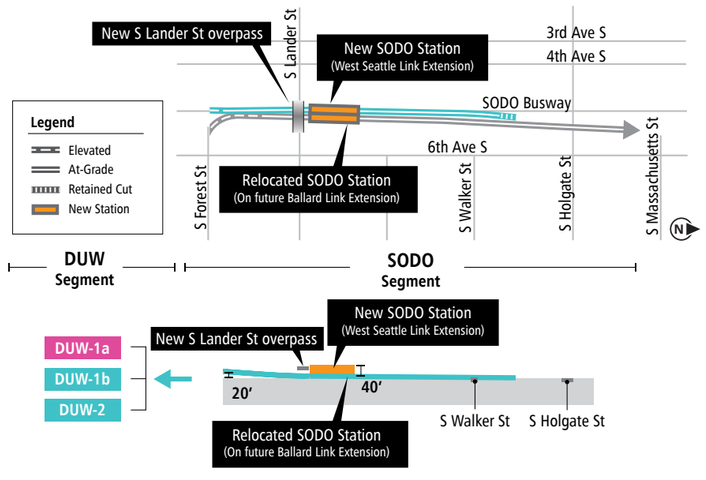
Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-7. SODO Segment - At-Grade South Station Option (SODO-1b)

At-Grade South Station Option (SODO-1b)

Alignment: Same as Alternative SODO-1a.

Station: SODO Station: At-grade, west of and 200 feet south of the existing at-grade SODO Station, just north of South Lander Street. The existing SODO Station would be relocated 200 feet south of its current location, adjacent to the new SODO Station.



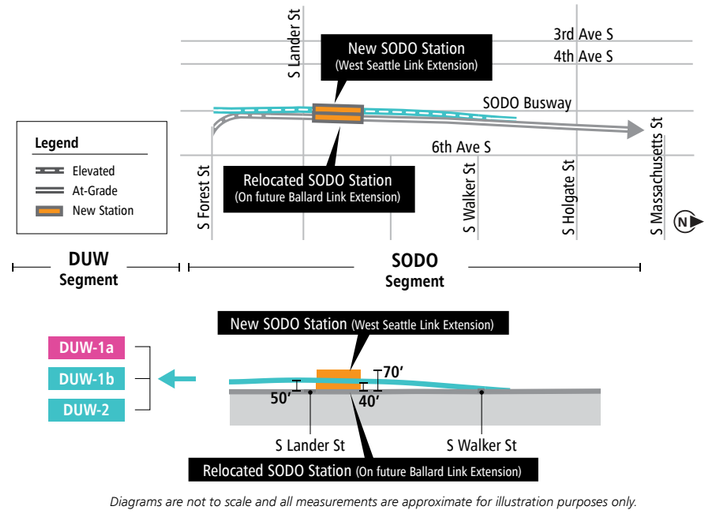
Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-8. SODO Segment - Mixed Profile Alternative (SODO-2)

Mixed Profile Alternative (SODO-2)

Alignment: The West Seattle Link Extension would begin just north of the existing SODO Station and travel at-grade west of and parallel to the existing Link light rail line in the SODO Busway. The guideway would transition to an elevated profile at South Walker Street and continue south over South Lander Street. The SODO Busway would be relocated to the west of the new rail line.

Station: SODO Station: Elevated north of South Lander Street, west of and 200 feet south of the existing SODO Station. The existing SODO Station would be relocated 200 feet south of its current location, adjacent to the new SODO Station.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-9. SODO Segment Alternatives

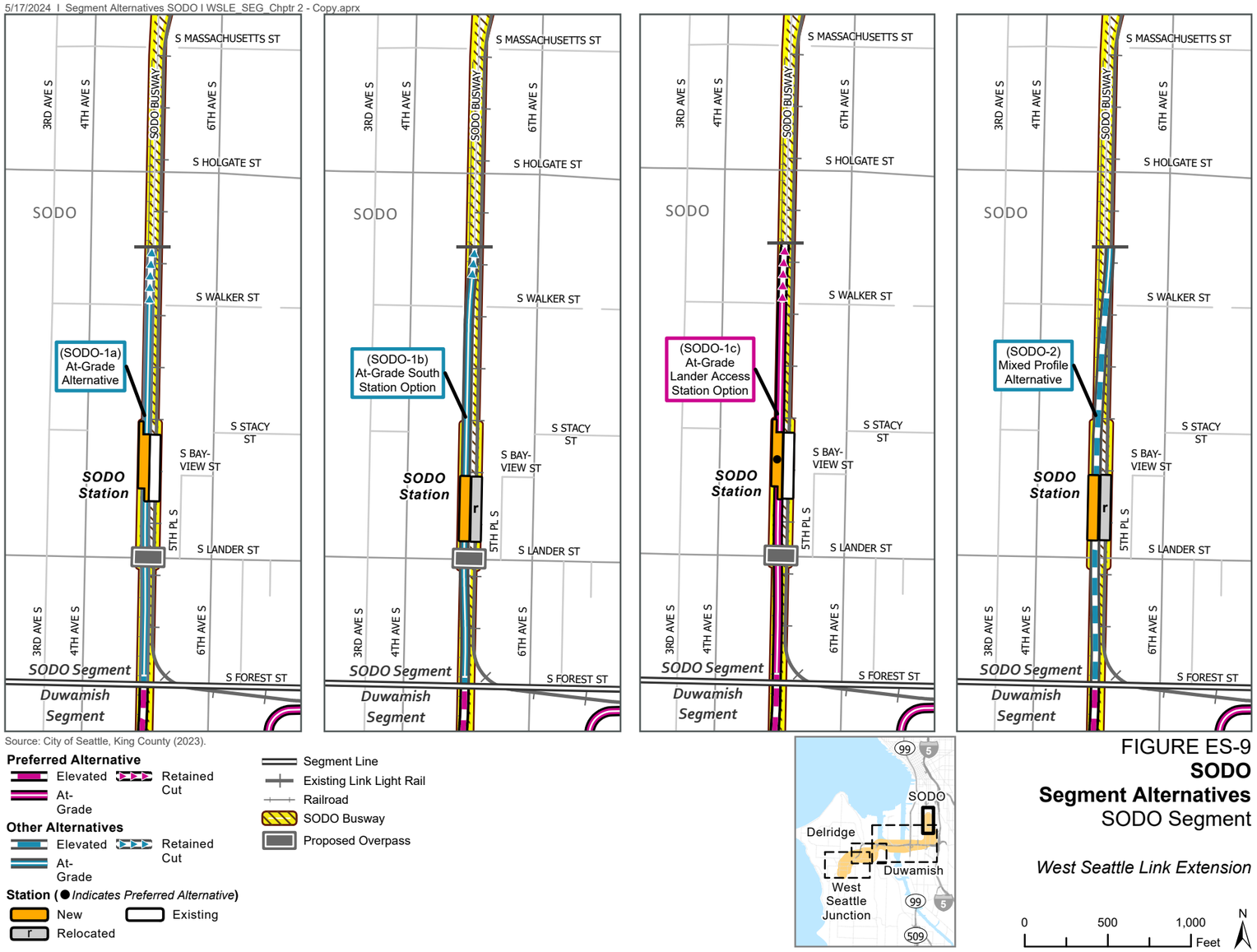


FIGURE ES-9
SODO Segment Alternatives
SODO Segment

West Seattle Link Extension

Comparison of SODO Segment Alternatives

Table ES-1 and the following text summarize key operational (i.e., long-term permanent) and construction impacts of the SODO Segment alternatives.

Preferred Option SODO-1c, Alternative SODO-1a, and Option SODO-1b would reconstruct South Lander Street as a roadway overpass over the existing and new light rail tracks. This overpass is not included with Alternative SODO-2, where the existing at-grade crossing of light rail tracks would remain. The South Lander Street overpass would improve truck and automobile mobility by eliminating conflict and delay with the existing light rail crossings.

For Preferred Option SODO-1c, Alternative SODO-1a, and Option SODO-1b, the SODO Busway would be permanently closed to buses. The SODO Busway would remain open with Alternative SODO-2 during project operations, but it would be closed for approximately 5 years during construction, and would be closed longer under cumulative conditions with construction of the Ballard Link Extension.

All alternatives would displace properties along the SODO Busway with murals that are part of the SODO Track art installation.

Option SODO-1b and Alternative SODO-2 would require relocation of the United States Postal Service Carrier Annex/Terminal Post Office at 4th Avenue South and South Lander Street. Relocation of the facility could be challenging due to its size, functions, and the service area that it would need to be within. Preferred Option SODO-1c and Alternative SODO-1a would avoid permanent impacts (i.e., operation and maintenance) to the United States Postal Service facility and would not require relocation of the facility.

Table ES-1. Key Environmental Impacts of the SODO Segment Alternatives

Resource Impact Measure	Preferred At-Grade Lander Access Station Option (SODO–1c)	At-Grade Alternative (SODO 1a)	At-Grade South Station Option (SODO-1b)	Mixed Profile Alternative (SODO-2)
Cost [a]	**750 to 800 million**	750 to 800 million	950 million to 1.05 billion	950 million to 1.05 billion
Ridership (daily boardings) [b]	**14,600** **M.O.S.: 12,400**	14,600 M.O.S.: 12,400	14,600 M.O.S.: 12,400	14,600 M.O.S.: 12,400
Operational Transportation Impacts	**0 intersections impacted.** **Eliminate existing at-grade conflicts at South Lander Street.** **Permanent closure of SODO Busway.**	0 intersections impacted. Eliminate existing at-grade conflicts at South Lander Street. Permanent closure of SODO Busway.	0 intersections impacted. Eliminate existing at-grade conflicts at South Lander Street. Permanent closure of SODO Busway.	0 intersections impacted. SODO Busway reopens, following construction.
Construction Transportation Impacts	**Full closure of South Lander Street (3 years).** **Detour a portion of the SODO Trail.** **Long-term (greater than 1 year) closure of the existing SODO Station.**	Full closure of South Lander Street (3 years). Detour a portion of the SODO Trail. Long-term (greater than 1 year) closure of the existing SODO Station.	Full closures of South Lander Street (3 years). Detour a portion of the SODO Trail. Long-term (greater than 1 year) closure of the existing SODO Station.	Full closure on South Lander Street on (nights/weekends). Detour a portion of the SODO Trail. SODO Busway closed for the duration of construction (5 years) Long-term (greater than 1 year) closure of the existing SODO Station.
Potential Displacements	**Residential: 0** **Businesses: 33** **Employees: 240**	Residential: 0 Businesses: 34 Employees: 240	Residential: 0 Businesses: 35 Employees: 260	Residential: 0 Businesses: 31 Employees: 280
Historic Properties and Historic Districts with Adverse Effects	**1**	1	1	1

Note: M.O.S. is only noted where there is a difference in impacts.

[a] The cost range provided is a risk-based value and may be adjusted as the project progresses.

[b] Ridership numbers are for 2042, after the Ballard Link Extension would be operational. The ridership is the total for the new and existing SODO stations. Ridership at the SODO Station would decrease if the Delridge Station was a terminus station of an M.O.S.

Existing SODO Station

ES.3.1.2. Duwamish Segment

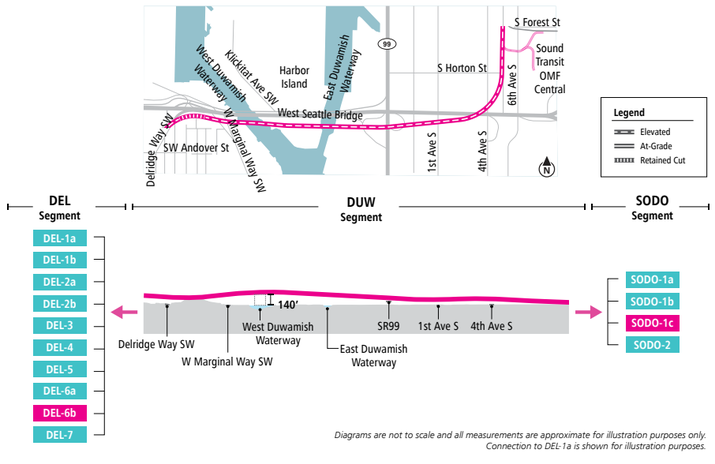
The Duwamish Segment includes the area between South Forest Street in the SODO neighborhood and the intersection of Southwest Charlestown Street and Delridge Way Southwest in the Delridge neighborhood. There are two alternatives and one design option, which are mostly elevated and include a bridge over the Duwamish Waterway. The location of the bridge varies by alternative and design option. The figures also show the Duwamish Segment alternatives in plan view and in profile view. This segment does not include a station, but does include a connection to the existing Operations and Maintenance Facility Central. All Duwamish alternatives include relocation of a 230-kilovolt power line starting at the Duwamish Segment boundary at South Forest Street. The power line would be relocated from the SODO Busway to 6th Avenue South and Diagonal Avenue South or across the Department of Highways District No. 1 property to connect to 5th Avenue South. Either relocation route would lead to the Seattle City Light electrical substation south of South Spokane Street. The Duwamish Segment alternatives and design option are shown together on Figure ES-13.

Figure ES-10. Duwamish Segment - Preferred South Crossing Alternative (DUW-1a)

Preferred South Crossing Alternative (DUW-1a)

Alignment: Elevated along the west side of the existing light rail line, south from South Forest Street; continuing southwest to cross over to the south side of the Spokane Street Bridge and the West Seattle Bridge. The guideway would continue west and to the south side of the West Seattle Bridge, crossing over the Duwamish Waterway and Harbor Island on a new high-level fixed bridge. The height of the bridge could be adjusted through coordination with the United States Coast Guard. The guideway would then cross the northern edge of Pigeon Point in a combination of elevated guideway and retained cut-and-fill; turning southwest on an elevated structure that follows Delridge Way Southwest.

Station: None.



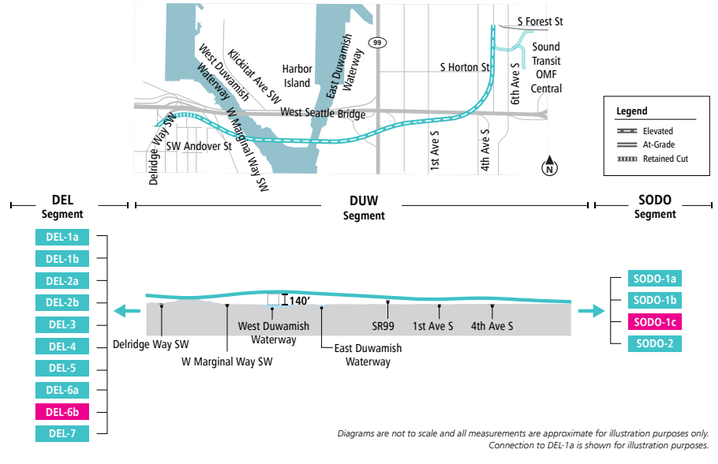
Diagrams are not to scale and all measurements are approximate for illustration purposes only. Connection to DEL-1a is shown for illustration purposes.

Figure ES-11. Duwamish Segment - South Crossing South Edge Crossing Alignment Option (DUW-1b)

South Crossing South Edge Crossing Alignment Option (DUW-1b)

Alignment: Same as the South Crossing Alternative except it would cross the Duwamish Waterway at a location farther south, over the southern edge of Harbor Island. The height of the bridge could be adjusted through coordination with the United States Coast Guard.

Station: None.



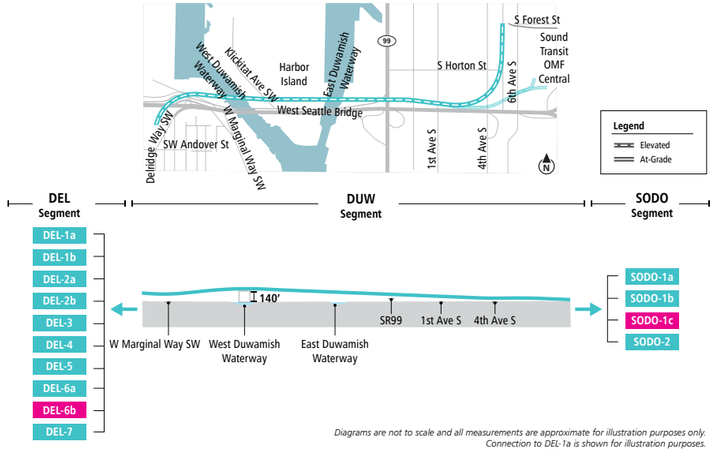
Diagrams are not to scale and all measurements are approximate for illustration purposes only. Connection to DEL-1a is shown for illustration purposes.

Figure ES-12. Duwamish Segment - North Crossing Alternative (DUW-2)

North Crossing Alternative (DUW-2)

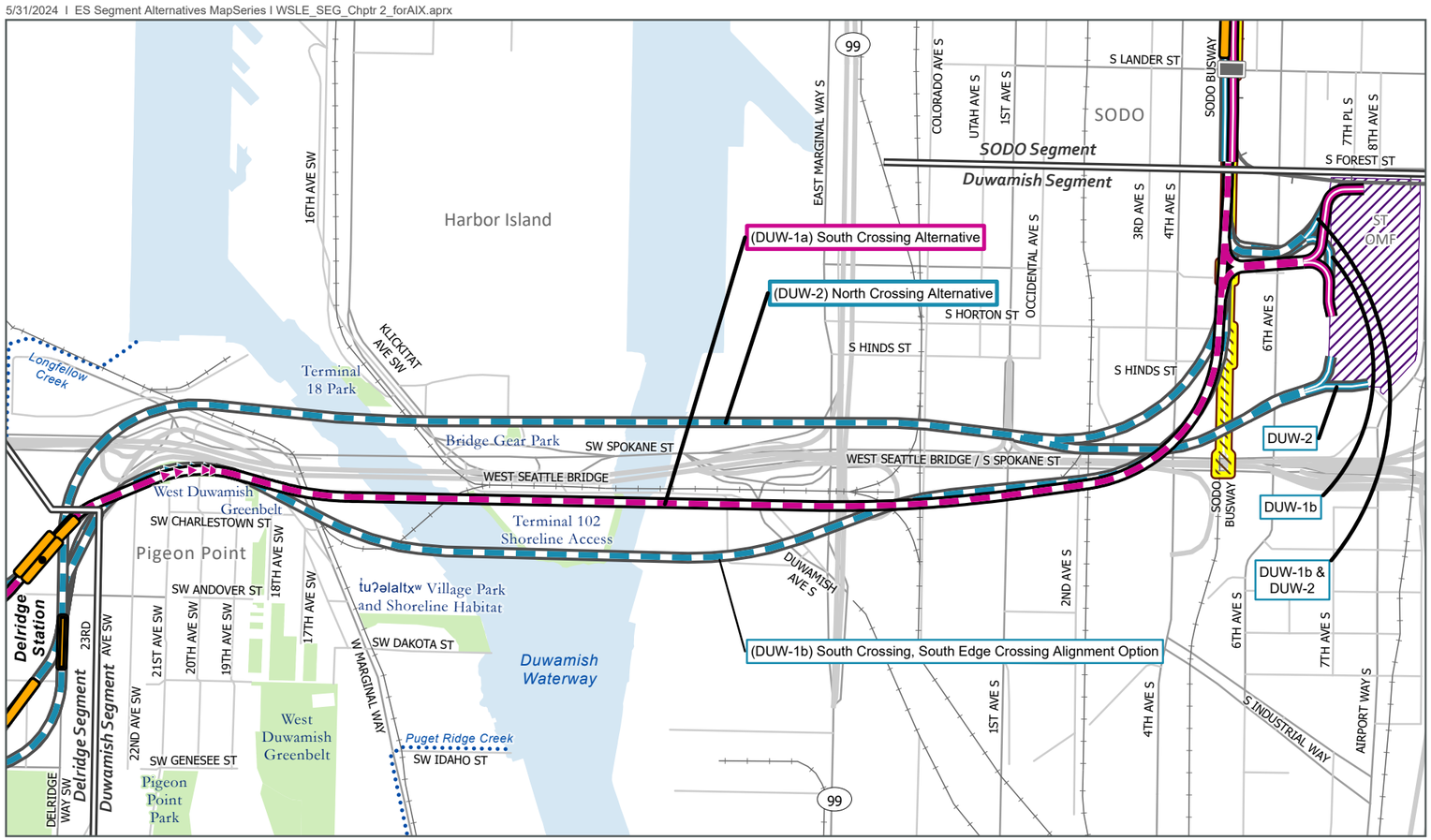
Alignment: Elevated along the west side of the existing light rail line south from South Forest Street; continuing west on a new high-level fixed bridge north of the existing West Seattle Bridge, crossing the West Waterway. The height of the bridge could be adjusted through coordination with the United States Coast Guard. The guideway would cross over the West Seattle Bridge and associated ramps, continuing south on the west side of Delridge Way Southwest.

Station: None.



Diagrams are not to scale and all measurements are approximate for illustration purposes only. Connection to DEL-1a is shown for illustration purposes.

Figure ES-13. Duwamish Segment Alternatives



Source: City of Seattle, King County (2023).

Preferred Alternative
- Elevated
- Retained Cut
- At-Grade

Other Alternatives
- Elevated
- Retained Cut
- At-Grade

Station (● *Indicates Preferred Alternative*)
- New

- Segment Line
- Existing Link Light Rail
- Railroad
- SODO Busway
- Proposed Overpass
- Sound Transit Operations and Maintenance Facility (ST OMF)
- Piped Stream
- Park

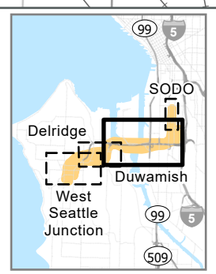


FIGURE ES-13
Duwamish Segment Alternatives
Duwamish Segment

West Seattle Link Extension

0 500 1,000 Feet N

Comparison of Duwamish Segment Alternatives

Table ES-2 and the following text summarize the key environmental impacts of the Duwamish Segment alternatives.

Preferred Alternative DUW-1a and Option DUW-1b would have greater park impacts than Alternative DUW-2. Most of the park impacts would occur in the West Duwamish Greenbelt, which is home to a great blue heron colony. Preferred Alternative DUW-1a and Option DUW-1b would result in the removal of trees in the great blue heron management area. Alternative DUW-2 would avoid impacts to the greenbelt but could impact the Port of Seattle's planned habitat restoration site at Terminal 25.

Sound Transit is evaluating multiple bridge types for crossing the West Waterway. Preferred Alternative DUW-1a would have either a cable-stayed or truss bridge over the West Waterway to avoid guideway columns in the water. Depending on bridge type, Alternative DUW-2 could potentially avoid placing guideway columns in the water. Option DUW-1b would require guideway columns in the water for all bridge types. In-water guideway columns with Option DUW-1b and Alternative DUW-2 would permanently remove in-water (benthic, or river bottom) habitat within waters that are essential fish habitat and critical habitat for listed salmon species.

The Muckleshoot Indian Tribe is signatory to both the Treaty of Point Elliott and the Treaty of Medicine Creek and has treaty-protected fishing rights and Usual and Accustomed Areas in the Puget Sound region, including the project area and the Duwamish Waterway. Bridge types with guideway columns and associated pier protection in the water, and to a lesser degree bridge types with guideway columns on shore, could affect the Muckleshoot Indian Tribe treaty-protected fishing rights and access to the Tribe's Usual and Accustomed Areas.

The Suquamish Tribe of the Port Madison Reservation (Suquamish Tribe) is signatory to the Treaty of Point Elliott and has treaty-protected fishing rights and Usual and Accustomed Areas in the Puget Sound region, including the project area and the Duwamish Waterway. Bridge types with guideway columns and associated pier protection in the water could also affect the Suquamish Tribe treaty-protected fishing rights and access to the Tribe's Usual and Accustomed Areas.

There are two Superfund sites with ongoing cleanups that overlap with the project limits in the Duwamish Segment. Sound Transit would coordinate with the United States Environmental Protection Agency and the Washington State Department of Ecology on any potential protective measures or restrictions that might be required for the project.

Aerial view of the Duwamish Waterway and Harbor Island

Photo Credit: Port of Seattle, http://www.portseattle.org

All alternatives would maintain the existing horizontal and vertical clearance over the United States Army Corps of Engineers-maintained navigation channel in the West Waterway. Alternative DUW-2 would reduce the horizontal and vertical clearance of the United States Army Corps of Engineers-maintained navigation channel in the East Waterway, just north of the existing Spokane Street Bridge restriction. Construction of a truss bridge over the West Waterway would result in a full 3-day closure when the center span is placed. All alternatives and bridge types would require short-term- closures of the navigation channel (of 4 to 12 hours) and could impact vessel movement outside the channel during construction. All alternatives would also require additional intermittent closures of part of the navigation channel for up to approximately 4 weeks during construction. Netting and scaffolding under the new guideway bridge during construction of all alternatives would temporarily reduce the vertical clearance on both waterways, and some vessels would not be able to pass under portions of the bridge.

All of the alternatives in this segment would displace businesses (and their employees) that are water-dependent or that support water-dependent businesses, which could be difficult to relocate. Based on available business information, Alternative DUW-2 would displace the most water-dependent businesses. The displacement of these businesses could impair the operations of waterway transportation and shipment of goods. As a result, there could be a broader effect on regional jobs and income than the jobs and businesses displaced directly by the project. Option DUW-1b would permanently displace moorage on the Duwamish Waterway, and all alternatives would temporarily displace moorage during construction. Replacement moorage is unlikely to be found nearby on the Duwamish Waterway and Elliott Bay. Alternative DUW-2 would also displace a Washington State Department of Social and Health Services facility, which would be challenging to relocate.

When connected with the Delridge Way Station Alternative (Alternative DEL-3) or the Delridge Way Station Lower Height Alternative (Alternative DEL-4), Preferred Alternative DUW-1a and Option DUW-1b would require temporary relocation of Fire Station 36 during construction and could potentially require permanent relocation. Preferred Alternative DUW-1a and Alternative DUW-2 would potentially require temporary relocation of parking and training facilities at Fire Station 14 during construction. If these relocations were necessary, Sound Transit would work closely with Seattle Fire Department officials to identify a suitable property within the surrounding area and ensure operations continue with minimal impacts during relocation. Preferred Alternative DUW-1a and Option DUW-1b would adversely affect a similar number of historic resources and would have adverse effects to two historic districts. Alternative DUW-2 would have adverse effects on more individual historic properties.

Alternative DUW-2 would temporarily close lanes of Chelan Avenue west of the West Marginal Way Southwest/Southwest Spokane Street/Chelan Avenue Southwest intersection. During construction, increased traffic congestion is expected at this intersection, with short-term lane closures on Chelan Avenue Southwest; however, one lane in each direction would be maintained.

Treaty-protected fishing rights and access to Usual and Accustomed Areas of the Muckleshoot Indian Tribe may be temporarily affected during construction activities on the shoreline or in the water for all alternatives, including placement of temporary cofferdams, work barges, and work trestles (for Option DUW-1b and Alternative DUW-2 only). Construction activities may also change vessel traffic patterns, which could interfere with upstream and downstream Tribal treaty-protected fishing rights and access.

Treaty-protected fishing rights and access to Usual and Accustomed Areas of the Suquamish Tribe may be temporarily affected during construction activities on the shoreline or in the water for all alternatives, including placement of temporary cofferdams, work barges, and work trestles (for Option DUW-1b and Alternative DUW-2 only). Construction activities may also change vessel traffic patterns, which could interfere with upstream and downstream Tribal treaty-protected fishing rights and access.

Table ES-2. Table ES-2. Key Environmental Impacts of the Duwamish Segment Alternatives

Resource Impact Measure	Preferred South Crossing Alternative (DUW-1a)	South Crossing South Edge Crossing Alignment Option (DUW-1b)	North Crossing Alternative (DUW-2)
Cost [a]	**1.90 to 2.15 billion**	1.90 to 2.10 billion	2.15 to 2.35 billion
Operational Transportation Impacts	**0 intersections impacted.**	0 intersections impacted.	0 intersections impacted.
Construction Transportation Impacts	**Detour a portion of the Delridge Connector Trail.** **Closure of the staircase through the West Duwamish Greenbelt.** **Closure of planned pedestrian path of the east side of West Marginal Way Southwest.** **Closure of Southwest Marginal Place connector trail.** **Partial closure of 4th Avenue South (1.5 years).** **Full closure of Delridge Way Southwest south of the West Seattle Bridge if connecting to DEL-5, DEL-6a, DEL-6b, or DEL-7.**	Detour a portion of the Delridge Connector Trail. Closure of the staircase through the West Duwamish Greenbelt. Closure of planned pedestrian path of the east side of West Marginal Way Southwest. Closure of Southwest Marginal Place connector trail. Partial closure of Delridge Way Southwest (9 months and nights/weekends)	Partial closure of Chelan Avenue Southwest west of the West Marginal Way Southwest/ Southwest Spokane Street/ Chelan Avenue Southwest intersection (3 months).
Potential Displacements [b]	**Residential: 20 to 28** **Business: 36 to 37** **Employees: 620**	Residential: 22 to 25 Business: 29 to 30 Employees: 380 to 390	Residential: 0 Business: 36 Employees: 380
Length of Potential Operational Visual Impacts (miles)	**0.1**	0.1	0
Potential Operational Noise Impacts before Mitigation (all impacts can be mitigated) [b, c]	**29 to 47**	35	1
Potential Operational Vibration or Groundborne Noise Impacts before Mitigation (all impacts can be mitigated) [b, c]	**1 to 2**	0	0
Biodiversity Area Impacts (acres operational/acres construction) [b]	**1.6 to 2.1/0.5 to 0.9**	1.9/0.6	0/0
In-water (Benthic Surface) Impacts (acres operational/acres construction) [d]	**0/0 to <0.1**	<0.1 to 0.4/0.6 to 1	0 to 0.5/0 to 0.9
Historic Properties and Historic Districts with Adverse Effects	**6**	6	9
Park and Recreational Resources Impacts [b] (acres operational/ acres construction)	**1.1 to 1.3/0.7 to 0.9**	1.2/1.6	0

[a] The cost range provided is a risk-based value and may be adjusted as the project progresses.

[b] Ranges reflect differences from connecting to different alternatives in adjacent segments.

[c] The numbers presented are the number of units, counted by individual residences, including individual units of multi-family structures, and number of structures for other uses, like schools, churches, and parks.

[d] The ranges shown represent impacts from different bridge types considered.

Visual Simulation of Preferred Alternative DUW-1a West Seattle Bridge eastbound lane, 300 feet west of 23rd Avenue Southwest right-of-way, looking southeast

Link light rail train approaching the existing SODO station

ES.3.1.3. Delridge Segment

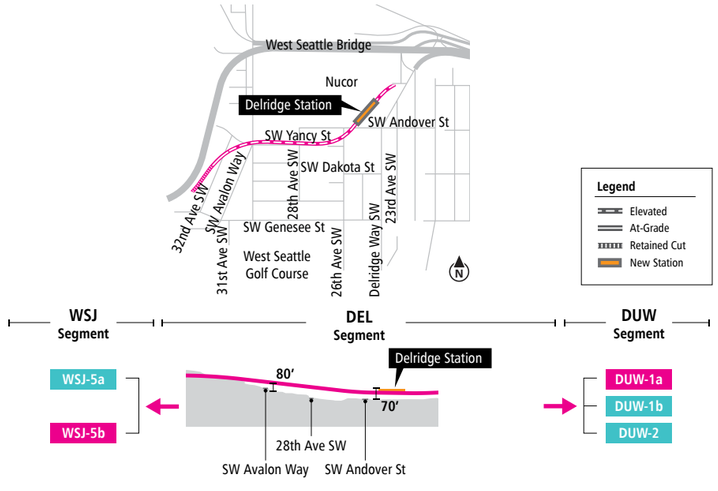
The Delridge Segment includes the area between Southwest Charlestown Street and 31st Avenue Southwest and has one station, the Delridge Station. There are seven alternatives and three design options in this segment. All of the Delridge Segment alternatives and design options are elevated, but six of them are lower height alternatives that enter into a tunnel portal on the west end near or in the West Seattle Junction Segment. Four of the alternatives generally follow Delridge Way Southwest and Southwest Genesee Street. Two design options are on the north side of Southwest Genesee Street. Two alternatives and one design option are further north, near Southwest Andover Street. The Delridge Segment alternatives and design options are shown together on Figure ES-24.

Figure ES-14. Delridge Segment – Preferred Andover Street Station Lower Height South Alignment Option (DEL-6b)

Preferred Andover Street Station Lower Height South Alignment Option (DEL-6b)

Alignment: Elevated along the west side of Delridge Way Southwest, north of Southwest Andover Street. The elevated guideway would travel west along the north side of Southwest Yancy Street then cross Southwest Avalon Way, transitioning from elevated to at-grade in the vicinity of 32nd Avenue Southwest. The guideway would turn south to travel south along the east side of the West Seattle Bridge connection to Fauntleroy Way Southwest and transition into a retained cut.

Station: Delridge Station – Elevated station north of Southwest Andover Street and west of Delridge Way Southwest in a northeast-southwest orientation.



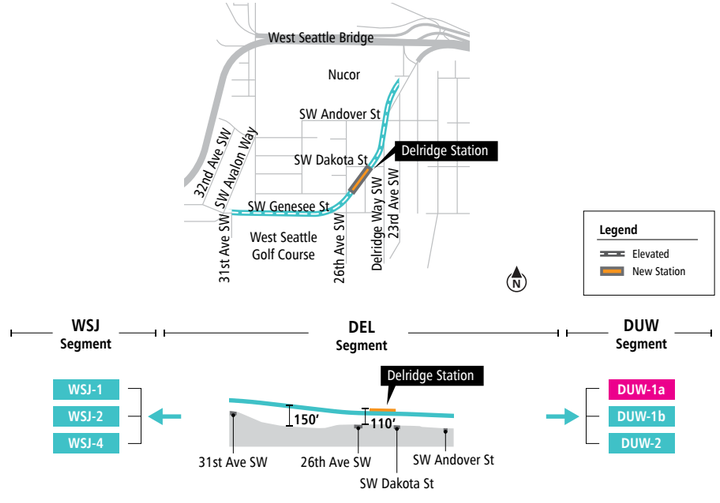
Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-15. Delridge Segment - Dakota Street Station Alternative (DEL-1a)

Dakota Street Station Alternative (DEL-1a)

Alignment: Elevated along the west side Delridge Way Southwest (except at Southwest Andover Street); continuing south to an elevated station; turning to the west and crossing to the south side of the Southwest Genesee Street right-of-way, north of the West Seattle Golf Course.

Station: Delridge Station - Elevated station south of Southwest Dakota Street, oriented southwest-northeast.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Visual simulation of Preferred Option DEL-6b looking west along Southwest Andover Street toward Delridge Way Southwest

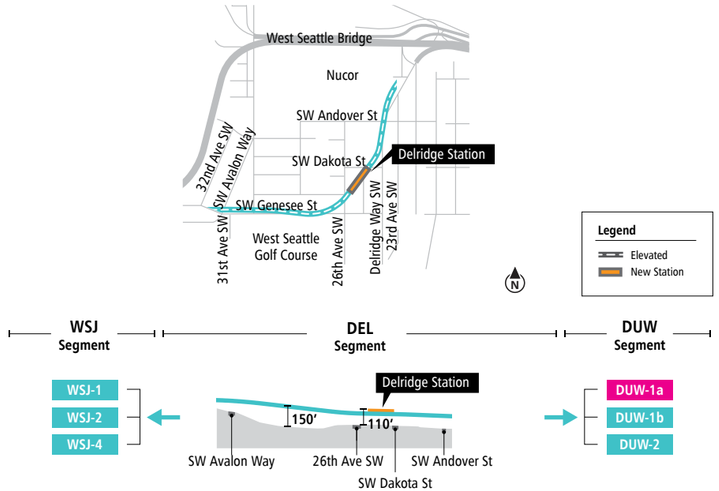
Visual Simulation of Alternative DEL-1a looking east along Southwest Genesee Street from Southwest Avalon Way

Figure ES-16. Delridge Segment - Dakota Street Station North Alignment Option (DEL-1b)

Dakota Street Station North Alignment Option (DEL-1b)

Alignment: Similar to Alternative DEL-1a, except it would shift to the north side of Southwest Genesee Street west of 28th Avenue Southwest.

Station: Same as Alternative DEL-1a.



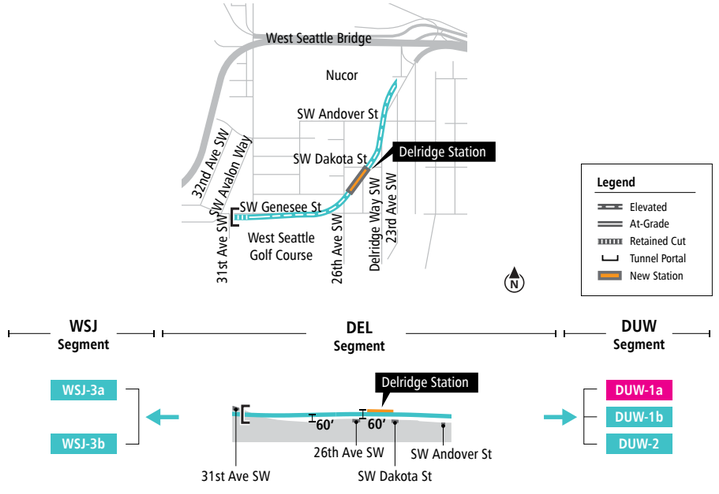
Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-17. Delridge Segment - Dakota Street Station Lower Height Alternative (DEL-2a)

Dakota Street Station Lower Height Alternative (DEL-2a)

Alignment: Elevated along the west side Delridge Way Southwest (except at Southwest Andover Street); continuing south to an elevated station; turning to the west and crossing to the south side of the Southwest Genesee Street right-of-way, north of the West Seattle Golf Course, with a tunnel portal for connecting to tunnel alternatives in the West Seattle Junction Segment in the northwest corner of the West Seattle Golf Course, south of Southwest Genesee Street and east of 31st Avenue Southwest.

Station: Delridge Station – Elevated station south of Southwest Dakota Street, oriented southwest-northeast.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Visual Simulation of Option DEL-1b looking east along Southwest Genesee Street from Southwest Avalon Way

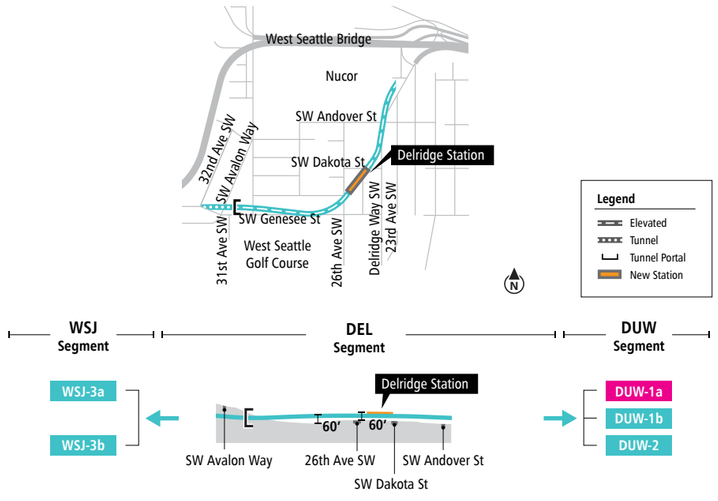
Visual Simulation of Alternative DEL-2a looking east along Southwest Genesee Street from Southwest Avalon Way

Figure ES-18. Delridge Segment - Dakota Street Station Lower Height North Alignment Option (DEL-2b)

Dakota Street Station Lower Height North Alignment Option (DEL-2b)

Alignment: Similar to the Alternative DEL-2a, except it would shift to the north side of Southwest Genesee Street west of 28th Avenue Southwest, with a tunnel portal north of Southwest Genesee Street, between Southwest Avalon Way and 30th Avenue Southwest.

Station: Same as Alternative DEL-2a.



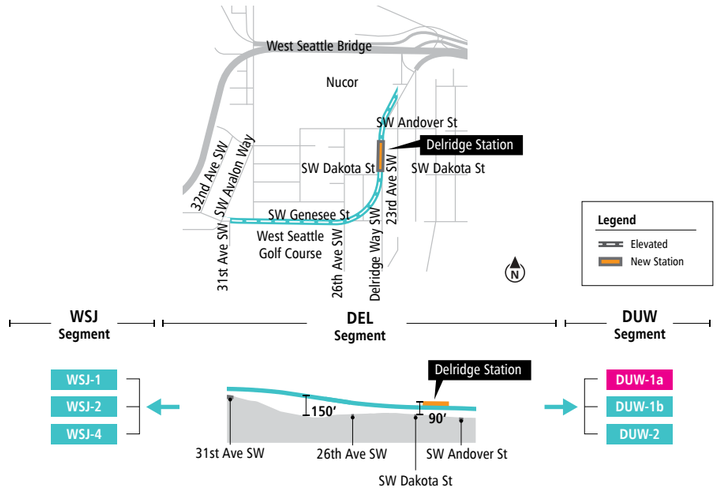
Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-19. Delridge Segment - Delridge Way Station Alternative (DEL-3)

Delridge Way Station Alternative (DEL-3)

Alignment: Elevated along Delridge Way Southwest to the station, turning west and crossing to the south side of the Southwest Genesee Street right-of-way, north of the West Seattle Golf Course and continuing west along the south edge of Southwest Genesee Street.

Station: Delridge Station – Elevated station in the middle of Delridge Way Southwest, north of Southwest Dakota Street.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Visual Simulation of Option DEL-2b looking east along Southwest Genesee Street from Southwest Avalon Way

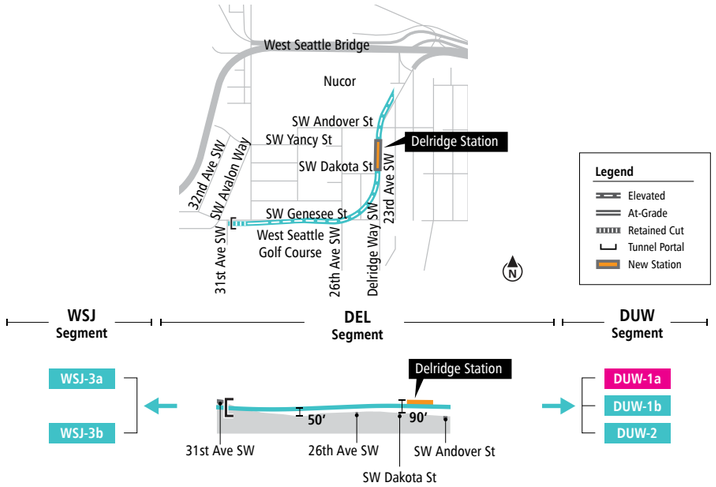
Visual Simulation of Alternative DEL-3 looking east along Southwest Genesee Street from Southwest Avalon Way

Figure ES-20. Delridge Segment - Delridge Way Station Lower Height Alternative (DEL-4)

Delridge Way Station Lower Height Alternative (DEL-4)

Alignment: Similar to Alternative DEL-3, except at a lower height to connect to tunnel alternatives in the West Seattle Junction Segment.

Station: Delridge Station – Elevated station in the middle of Delridge Way Southwest, north of Southwest Dakota Street.



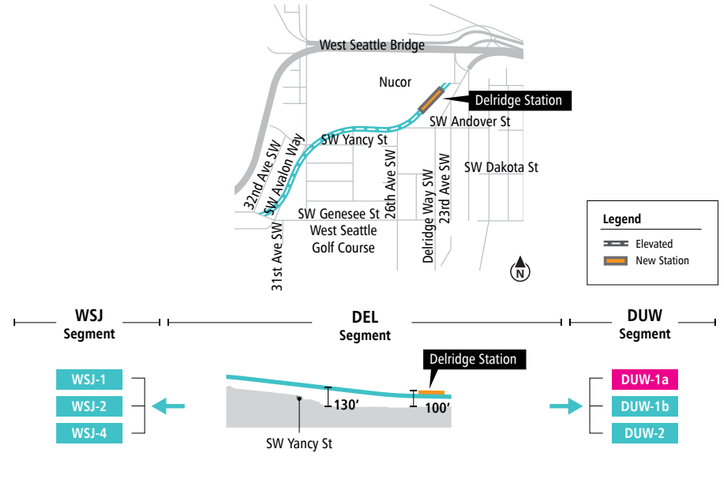
Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-21. Delridge Segment - Andover Street Station Alternative (DEL-5)

Andover Street Station Alternative (DEL-5)

Alignment: Elevated along the west side of Delridge Way Southwest, north of Southwest Andover Street; continuing west along Southwest Andover Street, then south along Southwest Avalon Way. The elevated guideway would continue south along Southwest Avalon Way, turning west on the north side of Southwest Genesee Street.

Station: Delridge Station – Elevated station north of Southwest Andover Street and west of Delridge Way Southwest in a northeast-southwest orientation.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Visual Simulation of Alternative DEL-4 looking east along Southwest Genesee Street from Southwest Avalon Way

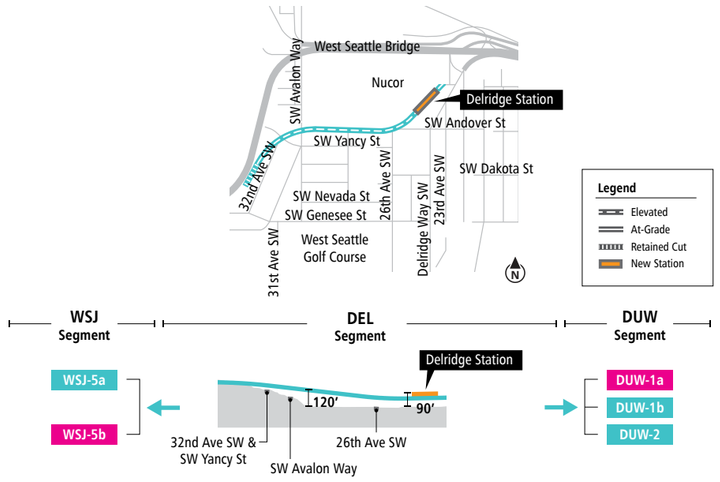
Visual Simulation of Alternative DEL-5 Southwest Avalon Way looking north at Southwest Genesee Street

Figure ES-22. Delridge Segment - Andover Street Station Lower Height Alternative (DEL-6a)

Andover Street Station Lower Height Alternative (DEL-6a)

Alignment: Elevated along the west side of Delridge Way Southwest, north of Southwest Andover Street; continuing west along Southwest Andover Street. The elevated guideway would cross over Southwest Avalon Way and turn south in the vicinity of 32nd Avenue Southwest to travel south along the east side of the West Seattle Bridge connection to Fauntleroy Way Southwest, transitioning from elevated into a retained cut. Near Southwest Genesee Street, the guideway would turn west, continuing in a retained cut, passing below Southwest Genesee Street.

Station: Delridge Station – Elevated station north of Southwest Andover Street and west of Delridge Way Southwest in a northeast-southwest orientation.



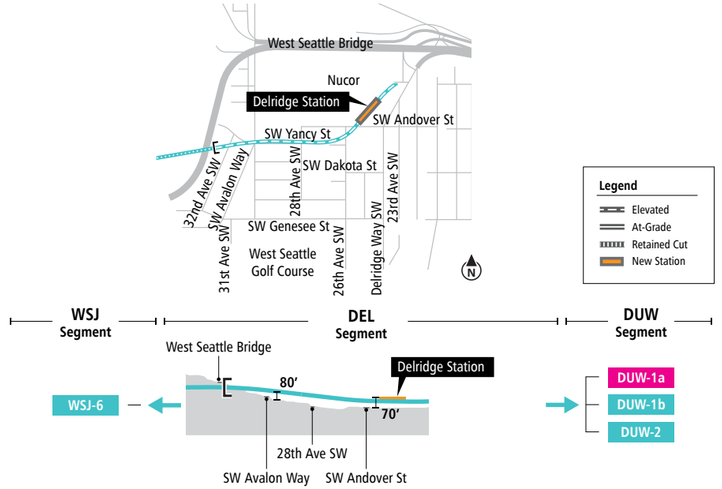
Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-23. Delridge Segment - Andover Street Station Lower Height No Avalon Station Tunnel Connection Alternative (DEL-7)

Andover Street Station Lower Height No Avalon Station Tunnel Connection Alternative (DEL-7)

Alignment: Elevated along the west side of Delridge Way Southwest, north of Southwest Andover Street. The elevated guideway would travel west along the north side of Southwest Yancy Street, then cross to the south side of Southwest Andover Street on an elevated guideway. A tunnel portal would be in the vicinity of 32nd Avenue Southwest, east of the West Seattle Bridge.

Station: Delridge Station – Elevated station north of Southwest Andover Street and west of Delridge Way Southwest in a northeast-southwest orientation.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Visual Simulation of Alternative DEL-6a looking north along 32nd Avenue Southwest

Visual Simulation of Alternative DEL-7 intersection of Southwest Andover Street and 32nd Avenue Southwest, looking South

Figure ES-24. Delridge Segment Alternatives

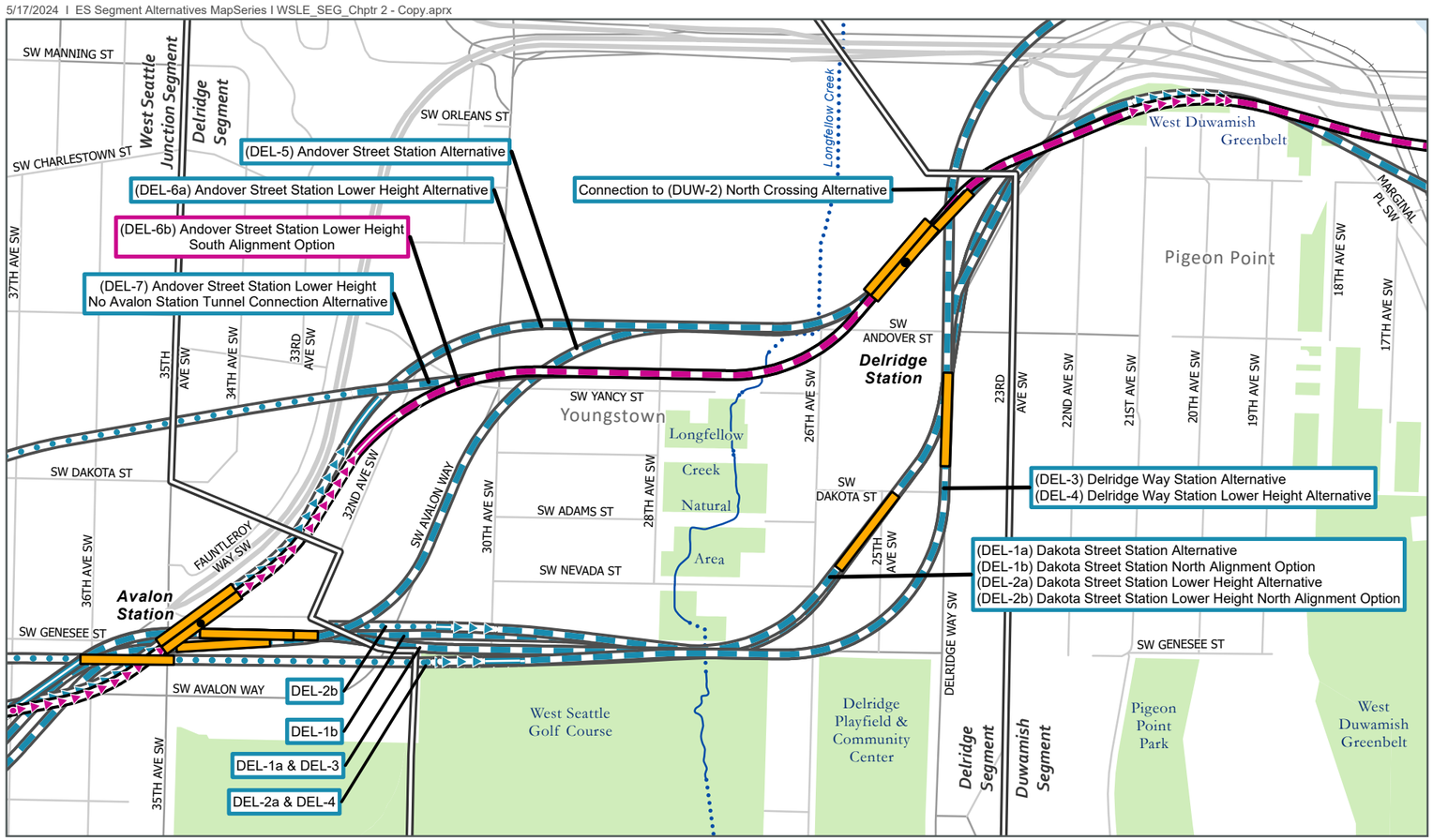


FIGURE ES-24
Delridge Segment Alternatives
Delridge Segment

West Seattle Link Extension

Comparison of Delridge Segment Alternatives

Table ES-3 and the following text summarize the key environmental impacts of the Delridge Segment alternatives.

The Delridge Segment alternatives would all be in a primarily single-family residential neighborhood where the elevated guideway and station would become a dominant feature. The alternatives with stations at Southwest Dakota Street (Alternative DEL-1a, Option DEL-1b, Alternative DEL-2a, and Option DEL-2b) would displace residential blocks in the southeast corner of the Youngstown area for the elevated guideway and Delridge Station, including some Seattle Housing Authority residences. These alternatives would have the greatest impact on neighborhood character due to the extent of displacements, the isolation of residences that would remain near the intersection of Delridge Way Southwest and Southwest Genesee Street, and visual change. These alternatives would have the greatest number of adverse effects to historic resources. Along with Alternative DEL-3 and Alternative DEL-4, these alternatives would impact the most area with sensitive viewers due to their height and location in the neighborhood, but impacts would differ among alternatives. Most visual impacts for the Dakota Street and Delridge Way station alternatives would be along Southwest Genesee Street. Alternative DEL-3 and Alternative DEL-4 would affect the neighborhood character in Delridge based on the station location.

Construction road closures on arterials within the Delridge Segment for Preferred Option DEL-6b and Alternatives DEL-6a and DEL-7 would be limited to nights and weekends. However, these alternatives would require closures on Delridge Way Southwest in the Duwamish Segment, unless connecting with Alternative DUW-2. Alternative DEL-7 would also have a short-term partial closure of the West Seattle Bridge just south of the Southwest Andover Street pedestrian bridge for 3 months to 6 months. All other alternatives would require longer temporary construction closures on arterials in the Delridge Segment.

Alternative DEL-1a, Option DEL-1b, Alternative DEL-2a, Option DEL-2b, Alternative DEL-3, and Alternative DEL-4 would displace four offices under the Washington State Department of Children, Youth, and Families. Alternative DEL-6a would displace the Transitional Resources (a behavioral health non-profit) main office, onsite supportive housing, and adjacent apartment building, while Preferred Option DEL-6b and Alternative DEL-7 would impact one single-family residence and Alternative DEL-5 would impact a duplex owned by this organization.

Preferred Option DEL-6b, Alternative DEL-6a, and Alternative DEL-7 would have fewer residential displacements, but slightly more business displacements than the other alternatives. All alternatives would displace businesses in a small business center that houses a neighborhood coffee shop, sandwich shop, and deli mart in an area with

limited neighborhood commercial uses. Preferred Option DEL-6b and Alternatives DEL-5, DEL-6a, and DEL-7 would displace the full business center, including a daycare.

Alternative DEL-1a, Option DEL-1b, Alternative DEL-2a, Option DEL-2b, Alternative DEL-3, and Alternative DEL-4 would affect the West Seattle Golf Course, but only Alternative DEL-2a and Alternative DEL-4 would permanently affect the playable area. Option DEL-1b would have less than 0.1 acre impact to Longfellow Creek Natural Area along Southwest Genesee Street, and Alternative DEL-3 would have similar impacts at a corner of Delridge Playfield.

Preferred Option DEL-6b and Alternative DEL-7 would cross Longfellow Creek where it is an open channel; however, direct impacts to the creek would be avoided. Preferred Option DEL-6b and Alternative DEL-7 would have construction impacts to vegetated portions of the area surrounding Longfellow Creek. These impacts would occur in wetlands, wetland buffer, and stream buffer.

If the Delridge Station was a terminus station of an M.O.S., it would have nearly 65 percent more daily boardings due to the additional bus service connections to the station. Bus services from the west (Alaska Junction area) and south would be rerouted to serve the Delridge terminus station. Alternative DEL-3 and Alternative DEL-4 would result in four additional residential property acquisitions to allow for the terminus station to accommodate additional bus layover facilities.

Table ES-3. Key Environmental Impacts of the Delridge Segment Alternatives

Resource Impact Measure	Preferred Andover Street Station Lower Height South Alignment Option (DEL-6b)	Dakota Street Station Alternative (DEL-1a)	Dakota Street Station North Alignment Option (DEL-1b)	Dakota Street Station Lower Height Alternative (DEL-2a)	Dakota Street Station Lower Height North Alignment Option (DEL-2b)	Delridge Way Station Alternative (DEL-3)	Delridge Way Station Lower Height Alternative (DEL-4)	Andover Street Station Alternative (DEL-5)	Andover Street Station Lower Height Alternative (DEL-6a)	Andover Street Station Lower Height No Avalon Station Tunnel Connection Alternative (DEL-7)
Cost [a]	**700 to 750 million**	850 million to 1.05 billion	950 million to 1.00 billion	600 to 650 million	700 to 750 million	800 to 850 million	600 to 650 million	750 to 800 million	550 to 600 million	700 to 800 million
Ridership (daily boardings)	**5,400** **M.O.S.: 8,400**	5,400 M.O.S.: 8,400	5,400 M.O.S.: 8,400	5,400 M.O.S.: 8,400	5,400 M.O.S.: 8,400	5,400 M.O.S.: 8,400	5,400 M.O.S.: 8,400	5,400 M.O.S.: 8,400	5,400 M.O.S.: 8,400	5,300 M.O.S.: 8,400
Operational Transportation Impacts	**3 intersections impacted (same with M.O.S.).** **Closure of a portion of 32nd Avenue Southwest near the alignment.**	2 intersections impacted (same with M.O.S.).	2 intersections impacted (same with M.O.S.).	2 intersections impacted (same with M.O.S.). Closure of 25th Avenue Southwest between Southwest Dakota Street and Southwest Genesee Street.	2 intersections impacted (same with M.O.S.). Closure of 30th Avenue Southwest at Southwest Genesee Street. Closure of 25th Avenue Southwest between Southwest Dakota Street and Southwest Genesee Street.	2 intersections impacted (same with M.O.S.).	2 intersections impacted (same with M.O.S.).	2 intersections impacted (same with M.O.S.).	2 intersections impacted (same with M.O.S.).	3 intersections impacted (same with M.O.S.). 32nd Avenue Southwest would no longer connect to Southwest Andover Street.
Construction Transportation Impacts	**No long-term closures of arterials.** **Full closure on Southwest Avalon Way (nights/ weekends).**	Full closure on Delridge Way Southwest (nights/ weekends), Southwest Dakota Street (nights/ weekends), Southwest Avalon Way (nights/ weekends), and Southwest Genesee Street (up to 3 years in 2 locations). Partial closure on Delridge Way Southwest (9 months).	Full closure on Delridge Way Southwest (nights/ weekends), Southwest Dakota Street (nights/ weekends), and Southwest Genesee Street (up to 3 years in 2 locations). Partial closure on Delridge Way Southwest (9 months) and Southwest Avalon Way (9 months).	Full closure on Delridge Way Southwest (nights/ weekends), Southwest Dakota Street (nights/ weekends) and Southwest Genesee Street (nights/ weekends). Partial closure on Delridge Way Southwest (9 months).	Full closure on Delridge Way Southwest (nights/ weekends), Southwest Dakota Street (nights/ weekends) and Southwest Genesee Street (nights/ weekends). Partial closure on Delridge Way Southwest (9 months) and Southwest Genesee Street (9 months).	Full closure on Delridge Way Southwest (nights/ weekends), Southwest Dakota Street (3 years), Southwest Avalon Way (nights/ weekends), and Southwest Genesee Street (up to 3 years in 2 locations). Partial closure on Delridge Way Southwest (3 years).	Full closure on Delridge Way Southwest (nights/ weekends), Southwest Dakota Street (3 years), and Southwest Genesee Street (nights/ weekends). Partial closure on Delridge Way Southwest (3 years), and Southwest Genesee Street (9 months).	Full closure on Southwest Avalon Way (1 year).	Full closure on Southwest Avalon Way (nights/ weekends).	Full closure on Southwest Avalon Way (nights/ weekends). Partial closure of the West Seattle Bridge just south of the Southwest Andover Street pedestrian bridge (3 to 6 months).

Resource Impact Measure	Preferred Andover Street Station Lower Height South Alignment Option (DEL-6b)	Dakota Street Station Alternative (DEL-1a)	Dakota Street Station North Alignment Option (DEL-1b)	Dakota Street Station Lower Height Alternative (DEL-2a)	Dakota Street Station Lower Height North Alignment Option (DEL-2b)	Delridge Way Station Alternative (DEL-3)	Delridge Way Station Lower Height Alternative (DEL-4)	Andover Street Station Alternative (DEL-5)	Andover Street Station Lower Height Alternative (DEL-6a)	Andover Street Station Lower Height No Avalon Station Tunnel Connection Alternative (DEL-7)
Potential Displacements [b]	**Residential: 34** **Business: 19** **Employees: 130**	Residential: 171 to 172 Business: 14 to 17 Employees: 150 to 160	Residential: 191 Business: 13 to 17 Employees: 140 to 150	Residential: 93 Business: 14 to 18 Employees: 150	Residential: 197 Business: 14 to 18 Employees: 150	Residential: 151 (+4 with M.O.S.) Business: 14 to 18 Employees: 150	Residential: 70 (+4 with M.O.S.) Business: 14 to 18 Employees: 150	Residential: 114 Business: 17 Employees: 130	Residential: 48 Business: 16 Employees: 110	Residential: 14 Business: 19 Employees: 130
Length of Potential Operational Visual Impacts (miles)	**0.1**	1.0	1.0	1.0	1.0	1.0	1.0	0.2	0.1	0.1
Potential Operational Noise Impacts before Mitigation (all impacts can be mitigated) [b, c]	**161**	234 to 247	218	241	178	245	246	251	68	228
Potential Operational Vibration or Groundborne Noise Impacts before Mitigation (all impacts can be mitigated) [c]	**1**	12	0	0	0	12	0	9	3	9
Wetland Impacts (acres operational/acres construction)	**<0.1/<0.1**	0/0	0/0	0/0	0/<0.1	0/0	0/0	0/0	0/<0.1	<0.1/<0.1
Wetland Buffer Impacts (acres operational/acres construction)	**0.2/0.4**	0.5/0.4	0.8/0.4	0.4/0.4	0.6/0.4	0.6/0.4	0.4/0.3	0/0.4	0/0.4	0.2/0.4
Historic Properties with Adverse Effects	**1**	6	7	6	6	4	4	2	0	1
Park and Recreational Resources Impacts (acres operational/acres construction)	**0**	0/1.1	0.1 /0.3	0.7/1.2	0/0.2	<0.1/1.3	0.8/0.9	0/0	0/0	0/0

Note: M.O.S. is only noted where there is a difference in impacts.

[a] The cost range provided is a risk-based value and may be adjusted as the project progresses.

[b] Ranges reflect differences from connecting to different alternatives in adjacent segments.

[c] The numbers presented are the number of units, counted by individual residences, including individual units of multi-family structures, and number of structures for other uses, like schools, churches, and parks.

ES.3.1.4. West Seattle Junction Segment

The West Seattle Junction Segment includes the area generally west of 31st Avenue Southwest, between Southwest Charleston Street and Southwest Hudson Street. There are six alternatives and two design options. Most alternatives would have two stations: Avalon and Alaska Junction. One alternative would have only one station, the Alaska Junction Station. Two of the alternatives are entirely elevated, two alternatives and one design option are entirely within a tunnel, and three alternatives are a combination of retained cut or elevated and tunnel. The tunnel alternatives with design options have different Alaska Junction Station locations. The West Seattle Junction Segment alternatives and design options are shown together on Figure ES-33.

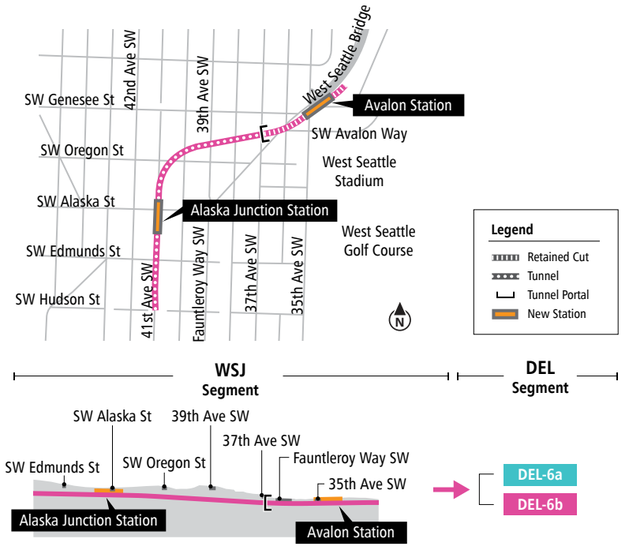
Figure ES-25. West Seattle Junction Segment - Preferred Medium Tunnel 41st Avenue Station West Entrance Station Option (WSJ-5b)

Preferred Medium Tunnel 41st Avenue Station West Entrance Station Option (WSJ-5b)

Alignment: Tunnel begins in a retained cut south of Southwest Yancy Street and follows the east side of the West Seattle Bridge/Fauntleroy Way Southwest to Southwest Genesee Street, entering into a tunnel at Southwest Genesee Street and 37th Avenue Southwest and curving southwest west of 37th Avenue Southwest to 41st Avenue Southwest to terminate at Southwest Hudson Street, with tail track in a north-south orientation under 41st Avenue Southwest.

Stations:

- **Avalon Station:** Lidded retained cut south of Southwest Genesee Street, beneath 35th Avenue Southwest.
- **Alaska Junction Station:** Tunnel beneath 41st Avenue Southwest and Southwest Alaska Street. Station entrances would be on either side of Southwest Alaska Street. The entrance south of Southwest Alaska Street would be on the west side of 41st Avenue Southwest. The entrance north of Southwest Alaska Street would be on the east side of 41st Avenue Southwest.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

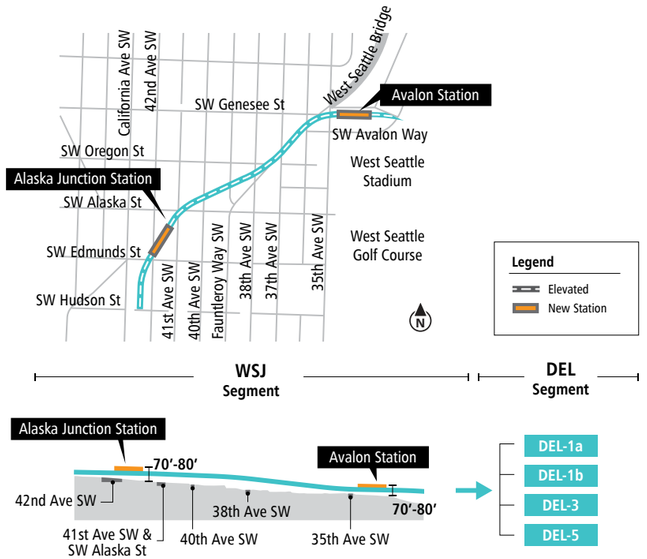
Figure ES-26. West Seattle Junction Segment - Elevated 41st/42nd Avenue Station Alternative (WSJ-1)

Elevated 41st/42nd Avenue Station Alternative (WSJ-1)

Alignment: Elevated along the south side of Southwest Genesee Street between 31st Avenue Southwest and Fauntleroy Way Southwest; turning southwest on the west side of Fauntleroy Way Southwest, turning south in the vicinity of 41st Avenue Southwest and Southwest Alaska Street and continues south to Southwest Hudson Street; ends on the west side of 42nd Avenue Southwest with tail track south of the Alaska Junction Station. A hi-rail access road would be provided for maintenance access.

Stations:

- **Avalon Station:** Elevated along the south side of Southwest Genesee Street, east of 35th Avenue Southwest.
- **Alaska Junction Station:** ele vated between 41st Avenue Southwest and 42nd Avenue Southwest, south of Southwest Alaska Street.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Photo on Southwest Alaska Street looking east toward California Avenue Southwest

Figure ES-27. West Seattle Junction Segment - Elevated Fauntleroy Way Station Alternative (WSJ-2)

Elevated Fauntleroy Way Station Alternative (WSJ-2)

Alignment: Elevated along the south side of Southwest Genesee Street between 31st Avenue Southwest and Fauntleroy Way Southwest. The alignment would head southwest on Fauntleroy Way Southwest and continue along the west side of Fauntleroy Way Southwest. The guideway would cross to the east side of Fauntleroy Way Southwest north of Southwest Oregon Street. This alternative would also include a hi-rail access road for maintenance of the guideway. Elevated tail tracks would begin south of the Alaska Junction Station and end within the Fauntleroy Way Southwest right-of-way just past Southwest Edmunds Street.

Stations:

- **Avalon Station:** Elevated along the south side of Southwest Genesee Street and east of 35th Avenue Southwest.
- **Alaska Junction Station:** Elevated southeast of Fauntleroy Way Southwest straddling Southwest Alaska Street.

Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-28. West Seattle Junction Segment - Tunnel 41st Avenue Station Alternative (WSJ-3a)

Tunnel 41st Avenue Station Alternative (WSJ-3a)

Alignment: Tunnel under Southwest Genesee Street heading west from 31st Avenue Southwest, then curving to the southwest between 37th Avenue Southwest and 41st Avenue Southwest, ending in the vicinity of Southwest Hudson Street, with the tail track in a north-south orientation under 41st Avenue Southwest.

Stations:

- **Avalon Station:** Tunnel beneath Southwest Genesee Street and Fauntleroy Way Southwest.
- **Alaska Junction Station:** Tunnel beneath 41st Avenue Southwest and Southwest Alaska Street.

Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-29. West Seattle Junction Segment - Tunnel 42nd Avenue Station Option (WSJ-3b)

Tunnel 42nd Avenue Station Option (WSJ-3b)

Alignment: Tunnel under Southwest Genesee Street heading west from 31st Avenue Southwest, then curving to the southwest between 37th Avenue Southwest and 42nd Avenue Southwest, ending in the vicinity of Southwest Hudson Street, with the tail track in a north-south orientation under 42nd Avenue Southwest.

Stations:

- **Avalon Station:** Tunnel beneath Southwest Genesee Street and Fauntleroy Way Southwest.
- **Alaska Junction Station:** Tunnel beneath 42nd Avenue Southwest and Southwest Alaska Street.

Diagrams are not to scale and all measurements are approximate for illustration purposes only.

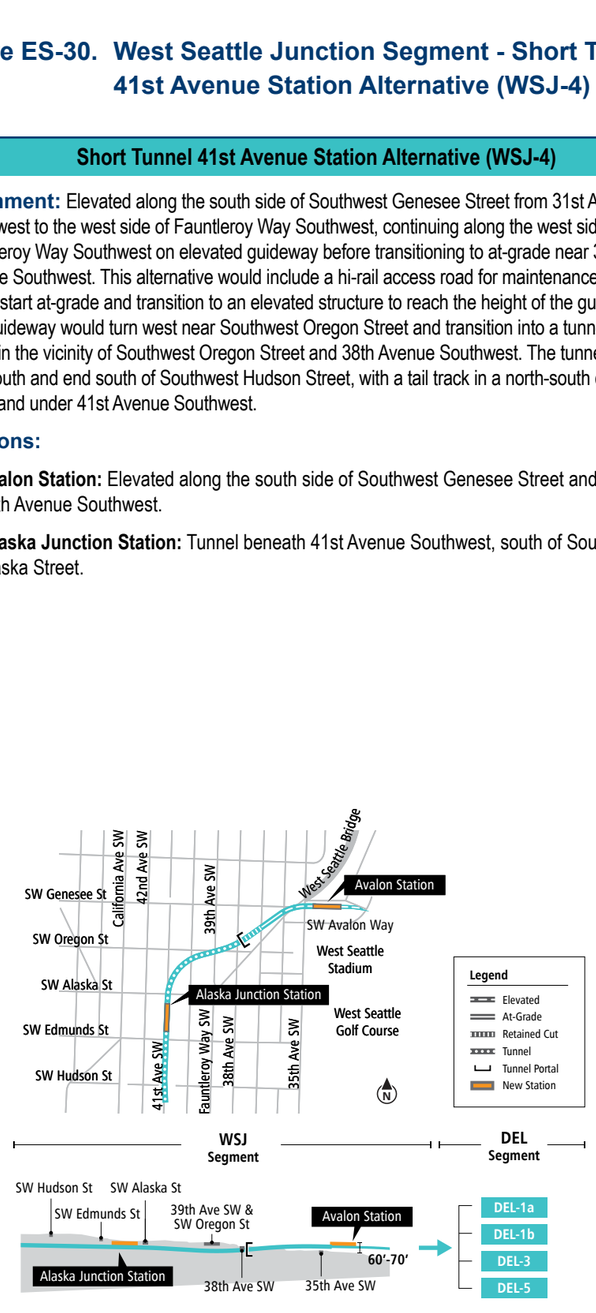
Figure ES-30. West Seattle Junction Segment - Short Tunnel 41st Avenue Station Alternative (WSJ-4)

Short Tunnel 41st Avenue Station Alternative (WSJ-4)

Alignment: Elevated along the south side of Southwest Genesee Street from 31st Avenue Southwest to the west side of Fauntleroy Way Southwest, continuing along the west side of Fauntleroy Way Southwest on elevated guideway before transitioning to at-grade near 37th Avenue Southwest. This alternative would include a hi-rail access road for maintenance, which would start at-grade and transition to an elevated structure to reach the height of the guideway. The guideway would turn west near Southwest Oregon Street and transition into a tunnel with a portal in the vicinity of Southwest Oregon Street and 38th Avenue Southwest. The tunnel would turn south and end south of Southwest Hudson Street, with a tail track in a north-south orientation along and under 41st Avenue Southwest.

Stations:

- **Avalon Station:** Elevated along the south side of Southwest Genesee Street and east of 35th Avenue Southwest.
- **Alaska Junction Station:** Tunnel beneath 41st Avenue Southwest, south of Southwest Alaska Street.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

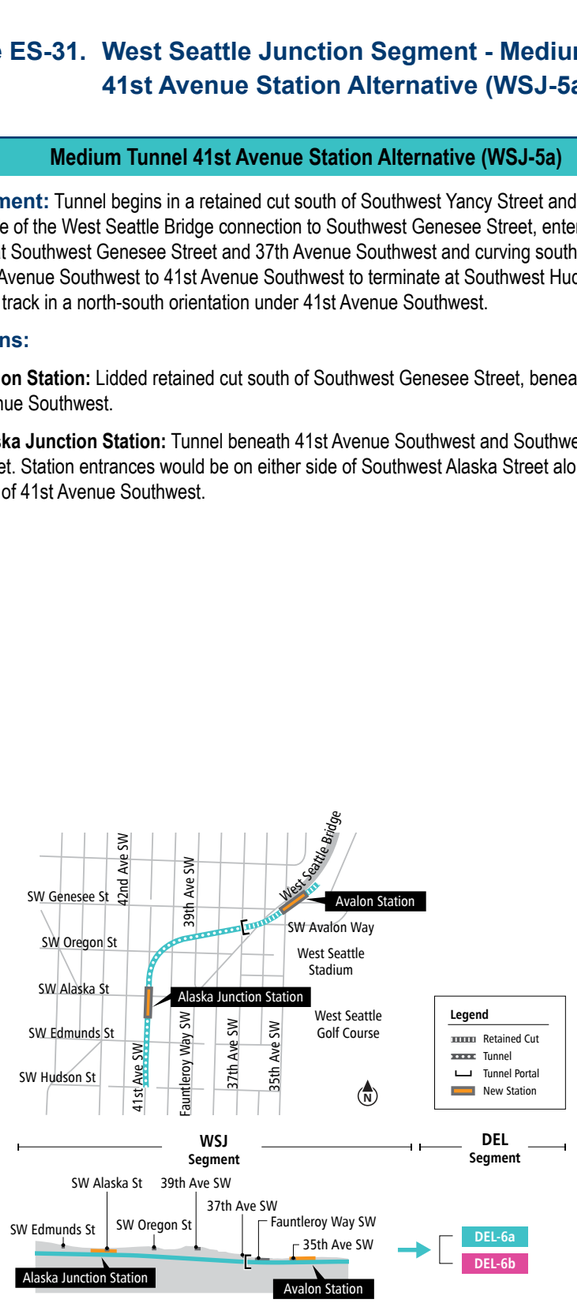
Figure ES-31. West Seattle Junction Segment - Medium Tunnel 41st Avenue Station Alternative (WSJ-5a)

Medium Tunnel 41st Avenue Station Alternative (WSJ-5a)

Alignment: Tunnel begins in a retained cut south of Southwest Yancy Street and follows the east side of the West Seattle Bridge connection to Southwest Genesee Street, entering into a tunnel at Southwest Genesee Street and 37th Avenue Southwest and curving southwest west of 37th Avenue Southwest to 41st Avenue Southwest to terminate at Southwest Hudson Street, with tail track in a north-south orientation under 41st Avenue Southwest.

Stations:

- **Avalon Station:** Lidded retained cut south of Southwest Genesee Street, beneath 35th Avenue Southwest.
- **Alaska Junction Station:** Tunnel beneath 41st Avenue Southwest and Southwest Alaska Street. Station entrances would be on either side of Southwest Alaska Street along the east side of 41st Avenue Southwest.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

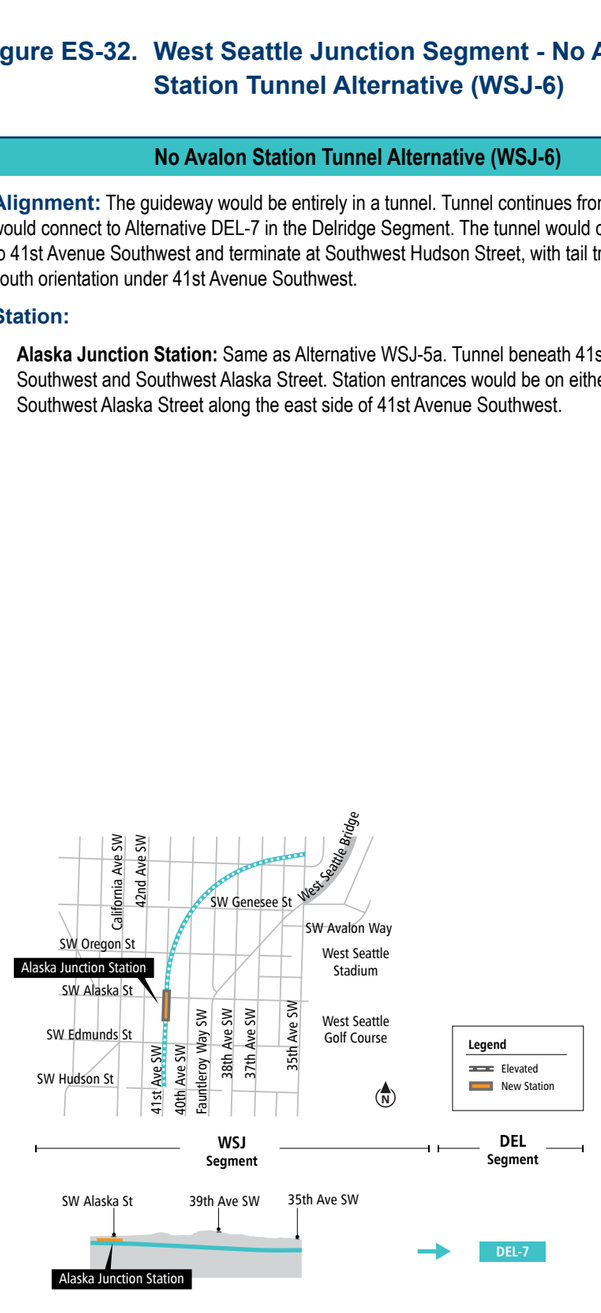
Figure ES-32. West Seattle Junction Segment - No Avalon Station Tunnel Alternative (WSJ-6)

No Avalon Station Tunnel Alternative (WSJ-6)

Alignment: The guideway would be entirely in a tunnel. Tunnel continues from where it would connect to Alternative DEL-7 in the Delridge Segment. The tunnel would curve southwest to 41st Avenue Southwest and terminate at Southwest Hudson Street, with tail tracks in a north-south orientation under 41st Avenue Southwest.

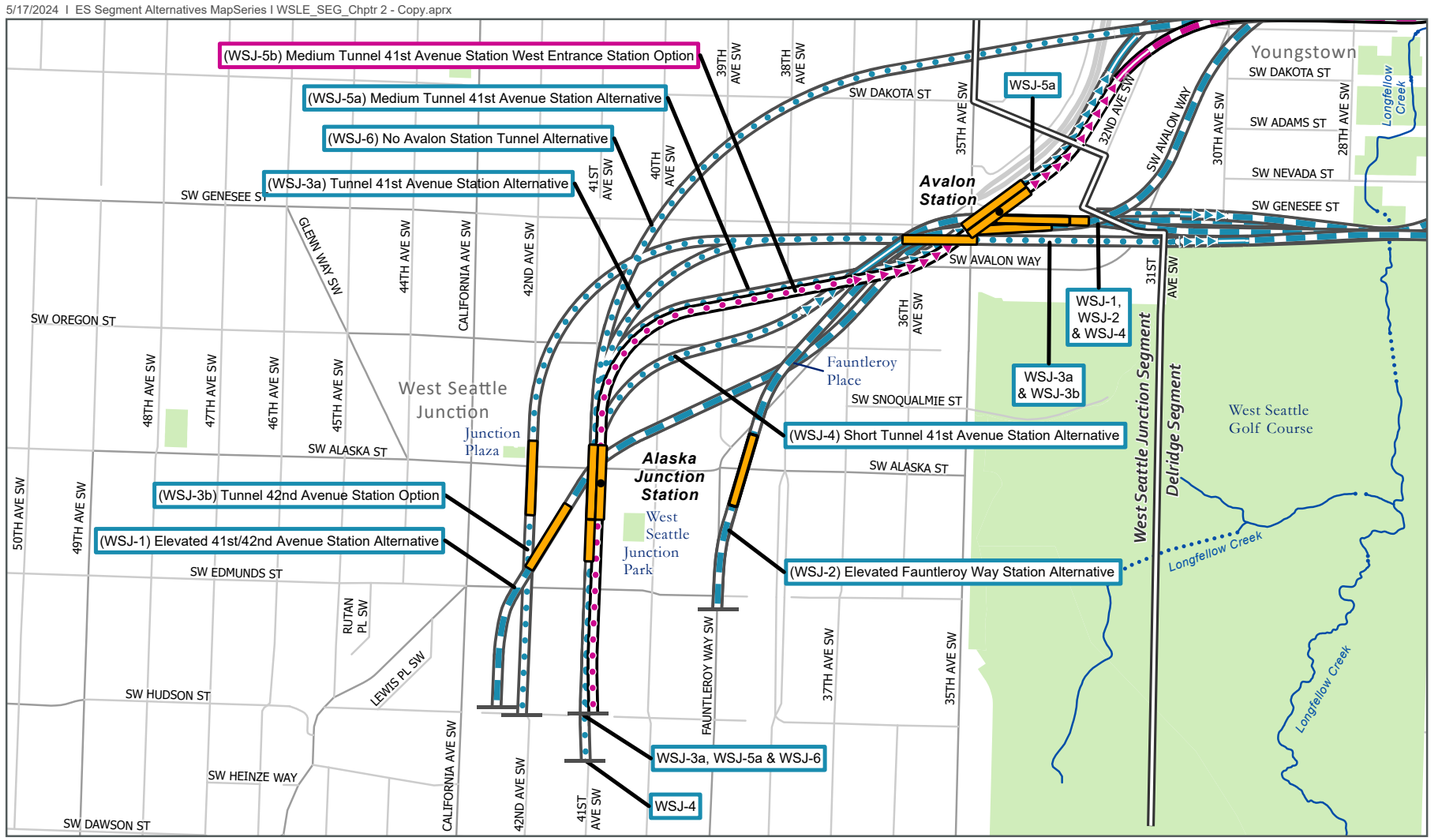
Station:

- **Alaska Junction Station:** Same as Alternative WSJ-5a. Tunnel beneath 41st Avenue Southwest and Southwest Alaska Street. Station entrances would be on either side of Southwest Alaska Street along the east side of 41st Avenue Southwest.



Diagrams are not to scale and all measurements are approximate for illustration purposes only.

Figure ES-33. West Seattle Junction Segment Alternatives



Source: City of Seattle, King County (2023).

Preferred Alternative
Elevated | Tunnel
At-Grade | Retained Cut

Other Alternatives
Elevated | Tunnel
At-Grade | Retained Cut

Station (● *Indicates Preferred Alternative*)
New

Segment Line
Stream
Piped Stream
Park

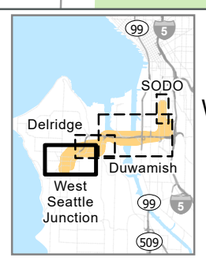


FIGURE ES-33
West Seattle Junction Segment Alternatives
West Seattle Junction Segment

West Seattle Link Extension

0 500 1,000 Feet N

Comparison of West Seattle Junction Segment Alternatives

Table ES-4 and the following text summarize the key environmental impacts of the West Seattle Junction Segment alternatives.

Alternative WSJ-1 and Alternative WSJ-2 would have the most impact on the community because the guideway would be entirely elevated and primarily outside of public right-of-way, which could have effects on neighborhood character and cohesion.

Alternative WSJ-1 and Alternative WSJ-2 would also displace rent and income-restricted housing units. Alternative WSJ-3a, Option WSJ-3b, Alternative WSJ-4, and Alternative WSJ-5a would displace an affordable housing apartment building. All alternatives would displace a Seattle Housing Authority single-family residence. Alternative WSJ-1 would displace a Trader Joe's grocery store and a Safeway grocery store, while Alternative WSJ-2 would displace the Trader Joe's. Preferred Option WSJ-5b and Option WSJ-3b would displace the Safeway. Option WSJ-3b would also displace Junction Plaza Park. Alternative WSJ-4 would have the greatest number of adverse effects to historic resources.

The tunnel alternatives would have fewer neighborhood impacts because all or some of the alignment would be below-grade, minimizing surface impacts. Alternative WSJ-6 would have the least impact on the community because it would be entirely within a tunnel and would have no Avalon Station. The tunnel alternatives would also reduce construction impacts on the community because much of the construction activity (except for the stations and the tunnel portals) would be underground. However, the tunnel alternatives would have the greatest potential for noise impacts during construction, including night-time construction noise at the tunnel portals.

Table ES-4. Table ES-4. Key Environmental Impacts of the West Seattle Junction Segment Alternatives

Resource Impact Measure	Preferred Medium Tunnel 41st Avenue Station West Entrance Station Option (WSJ-5b)	Elevated 41st/42nd Avenue Station Alternative (WSJ-1)	Elevated Fauntleroy Way Station Alternative (WSJ-2)	Tunnel 41st Avenue Station Alternative (WSJ-3a)	Tunnel 42nd Avenue Station Option (WSJ-3b)	Short Tunnel 41st Avenue Station Alternative (WSJ-4)	Medium Tunnel 41st Avenue Station Alternative (WSJ-5a)	No Avalon Station Tunnel Alternative (WSJ-6)
Cost [a]	**1.75 to 1.90 billion**	1.70 to 1.85 billion	1.05 to 1.15 billion	2.10 to 2.35 billion	2.20 to 2.40 billion	1.65 to 1.80 billion	1.60 to 1.80 billion	1.40 to 1.50 billion
Ridership (daily boardings)	**7,600**	7,600	8,000	7,600	7,600	7,600	7,600	7,500
Operational Transportation Impacts	**2 intersections impacted.** **Closure of Southwest Genesee Street at 35th Avenue Southwest.**	1 intersection impacted.	6 intersections impacted.	1 intersection impacted.	1 intersection impacted.	1 intersection impacted. Closure of 37th Avenue Southwest north of Fauntleroy Way Southwest and 38th Avenue Southwest north of Southwest Oregon Street.	2 intersections impacted. Closure of Southwest Genesee Street at 35th Avenue Southwest.	0 intersections impacted.
Construction Transportation Impacts	**Full closure on 35th Avenue Southwest near the West Seattle Bridge (1 year).** **Partial closure on Fauntleroy Way Southwest (1.5 years)**	Full closure on Fauntleroy Way Southwest (nights/ weekends), and 35th Avenue Southwest near the West Seattle Bridge (nights/ weekends).	Full closure on Fauntleroy Way Southwest (nights/ weekends), 35th Avenue Southwest near the West Seattle Bridge (nights/ weekends), and on Southwest Alaska Street (3 years).	Full closure on 35th Avenue Southwest near the West Seattle Bridge (3 years). Partial closure on Fauntleroy Way Southwest (1.5 years).	Full closure on 35th Avenue Southwest near the West Seattle Bridge (3 years). Partial closure on Fauntleroy Way Southwest (1.5 years).	Full closure on Fauntleroy Way Southwest (nights/ weekends), and 35th Avenue Southwest near the West Seattle Bridge (nights/ weekends). Partial closure on Fauntleroy Way Southwest (9 months).	Full closure on 35th Avenue Southwest near the West Seattle Bridge (1 year). Partial closure on Fauntleroy Way Southwest (1.5 years).	No long-term closures of major arterials.
Potential Displacements [b]	**Residential: 111** **Business: 44** **Employees: 240**	Residential: 351 to 370 Business: 57 Employees: 290	Residential: 474 to 493 Business: 15 to 18 Employees: 90 to 100	Residential: 162 to 269 Business: 15 to 18 Employees: 100 to 110	Residential: 126 to 230 Business: 42 to 45 Employees: 230 to 240	Residential: 253 Business: 17 Employees: 110	Residential: 153 Business: 15 Employees: 100	Residential: 109 Business: 6 Employees: 70
Length of Potential Operational Visual Impacts (miles)	**0**	0.1	0.2	0	0	0	0	0
Potential Operational Noise Impacts before Mitigation (all impacts can be mitigated) [b, c]	**5**	414	312 to 356	0	0	140	5	0
Potential Operational Vibration or Groundborne Noise Impacts before Mitigation (all impacts can be mitigated) [b,c]	**158**	7	0	24 to 199	269 to 430	153	79	144
Historic Properties with Adverse Effects	**0**	4	4	3	3	7	0	0
Park and Recreational Resources Impacts (acres operational/acres construction)	**0/0**	0.1/0	0.1/0	0/0	0.2/0	0/0	0/0	0/0

[a] The cost range provided is a risk-based value and may be adjusted as the project progresses.
[b] Ranges reflect differences from connecting to different alternatives in adjacent segments.
[c] The numbers presented are the number of units, counted by individual residences, including individual units of multi-family structures, and number of structures for other uses, like schools, churches, and parks.

ES.3.2. No Build Alternative

The No Build Alternative includes the transportation system and environment as they would exist in 2042 without the project, and it provides a baseline condition for comparing impacts of the Build Alternatives. The year 2042 is used as the analysis year because it is consistent with Puget Sound Regional Council's 2040 planning horizon year and aligns with full buildout of the light rail capital projects included in the Sound Transit 3 Plan under the realignment target schedule. Under the affordable schedule, only south Kirkland to Issaquah would not be complete by 2042. The No Build Alternative includes projects and funding packages in the central Puget Sound region that are planned to occur with or without the project. No Build Alternative improvements include transit, roadway, and other transportation actions by state, regional, and local agencies that are currently funded or committed, and those that are likely to be implemented based on approved and committed funding. Section 2.2, No Build Alternative, of Chapter 2 identifies the major rail improvements assumed as part of the No Build Alternative.

ES.4 Avoidance, Minimization, and Mitigation Measures

Sound Transit will comply with applicable federal, state, and local environmental regulations and apply reasonable mitigation measures to reduce significant adverse impacts. The Final EIS identifies avoidance and minimization measures as well as potential measures to mitigate adverse long-term and construction impacts that would be part of the project. These measures would be refined through final design and permitting. The FTA will issue the NEPA Record of Decision (ROD) after the Final EIS that will include a list of all committed mitigation measures for the project to be built.

The following is a summary of select potential mitigation measures for impacts that the project alternatives may not be able to fully minimize or avoid.

Transportation: Mitigation would be needed at a number of intersections to mitigate the long-term impact of reduced level of service. Mitigation could include corridor signal optimization, upgraded signal technologies, implementation of corridor intelligent transportation system strategies, traffic movement and turn restrictions, or adding vehicle capacity to reduce intersection congestion, where feasible and as agreed to by the City of Seattle. Sound Transit would develop Construction Access and Traffic Management Plans for the project to mitigate impacts to roadways during construction.

Sound Transit would continue to coordinate with transit service providers to maintain efficient transit operations. Construction-related transit service impacts, such as the SODO Busway closure (whether permanent or temporary) with all SODO Segment alternatives, as well as other transit pathway closures identified in this Final EIS, would be coordinated with Metro, the City of Seattle, and other relevant service providers. During construction where roadways are closed, Sound Transit would coordinate with Metro, the City of Seattle, and FTA on bus service and associated infrastructure modifications and transit facility improvements that maintain transit service and access through construction areas. Buses would be rerouted to nearby streets where appropriate to maintain transit service and temporary bus facilities may need to be installed.

Sound Transit is committed to maintaining the regional transit access provided by the SODO Station during construction of the West Seattle Link Extension. Mitigation measures could include the following:

- Studying the feasibility of building an interim station/platforms in the vicinity of the existing SODO Station with connections to transit routes on 4th Avenue South and South Lander Street
- Implementing a transit shuttle between the SODO Station area and Stadium Station
- Working with Metro to adjust routing of buses near the SODO Station to provide a convenient connection from the SODO Station area to an adjacent 1 Line station (Stadium and/or Beacon Hill stations)

Sound Transit would work with the Port of Seattle and Northwest Seaport Alliance to identify construction management measures to maintain adequate port terminal access and operations along its primary drayage routes between the marine and rail terminals. Sound Transit would also coordinate with the BNSF Railway and Union Pacific Railroad prior to construction over rail tracks or ground improvements for guideway columns close to the rail tracks. To the extent feasible, construction activities would adhere to schedule and minimum clearance requirements as agreed to by Sound Transit and BNSF Railway

Existing or planned designated bicycle facilities or routes may be permanently impacted by the project. Sound Transit would work with the City of Seattle to rebuild affected facilities or develop alternate facilities or routes. Pedestrian facilities would also be permanently impacted, and Sound Transit would fund improvements to mitigate these impacts, such as widened sidewalks or new walkways, as well as associated treatments that may be required for safe operations. During construction, Sound Transit would minimize potential effects on pedestrian and bicycle facilities by providing clearly marked detours within construction areas, which at minimum would comply with Americans with Disabilities Act requirements. When maintaining a facility would not be feasible, Sound Transit would work with the City of Seattle to develop and implement a construction management plan to provide alternate facilities for non-motorized travel.

Sound Transit would comply with navigation mitigation requirements identified by the Muckleshoot Indian Tribe, the Suquamish Tribe, the United States Coast Guard, and the United States Army Corps of Engineers through the bridge permitting process. Sound Transit has prepared a Navigation Impact Report for the United States Coast Guard for the Duwamish Crossing. On January 4, 2022, based on the findings in the navigation impact report, the Coast Guard issued a preliminary navigation clearance determination for any bridge Sound Transit would construct over the West Waterway as part of the project. Sound Transit would develop a construction navigation management plan in consultation with the United States Coast Guard, the United States Army Corps of Engineers, and Port of Seattle to mitigate impacts to navigation during construction.

Visual: Sound Transit would use visual enhancement measures to mitigate adverse visual impacts where they would occur, such as planting screening vegetation where appropriate and replanting vegetation that would not conflict with the light rail operations to replace vegetation removed for construction.

Noise: Noise impacts from light rail operation would be mitigated by building sound walls, using wheel squeal reduction measures and special trackwork, installing sound insulation in buildings, and other measures. For construction staging areas near tunnel portals, mitigation measures could include construction of temporary noise barriers adjacent to the staging area.

Vibration: Sound Transit would install high-resilience fasteners or other low-vibration specialized track work to reduce vibration or groundborne noise from light rail operation, where necessary.

Ecosystems: During final design and permitting, Sound Transit would first try to avoid and minimize long-term and construction in-water impacts and impacts on wetlands, fisheries and benthic surface, streams and stream buffers, and vegetation and wildlife habitat through design measures and best management practices. Where impacts are unavoidable, Sound Transit will mitigate them in accordance with applicable federal regulations, local critical area ordinances, and permit requirements. Work within the great blue heron management zone would require development of and adherence to a habitat management plan to comply with City of Seattle, Washington Department of Fish and Wildlife, and United States Fish and Wildlife recommendations and requirements.

Construction of retaining wall for Federal Way Link Extension

Sound Transit will provide compensatory mitigation to achieve no net loss of ecosystem function and acreage and will either use the in-lieu fee program through the King County Mitigation Reserves Program, approved mitigation banks through the Port of Seattle, offsite compensatory mitigation, or project-specific mitigation developed concurrently by Sound Transit and approved by appropriate regulatory agencies to mitigate impacts. For wetland and stream buffer impacts associated with Preferred Option DEL-6b and Alternative DEL-7, as well as tree replacement for project-wide impacts, onsite mitigation is proposed on property adjacent to Longfellow Creek, if this property is acquired for project construction between Southwest Andover Street and Southwest Yancy Street.

Archaeological and Historic Resources: To address adverse effects to National Register-eligible or -listed resources that cannot be avoided or minimized, FTA and Sound Transit, in consultation with the State Historic Preservation Officer, Tribes, and other consulting parties are developing a Section 106 programmatic agreement to resolve adverse effects to historic properties for the project. The programmatic agreement will be executed prior to FTA issuing a Record of Decision for the West Seattle Link Extension. Sound Transit is also addressing potential impacts to previously undocumented archaeological resources through a phased archaeological survey work plan, including pre-construction inventory work that will occur in coordination with Tribes and the State Historic Preservation Officer. This pre-construction inventory work will be phased to coordinate with property acquisition and project construction according to the process outlined in the Archaeological Survey and Inventory Plan and as stipulated in the Section 106 programmatic agreement. The final agreement will include an Archaeological Treatment Plan to address the discovery of archaeological and historic resources during project activities. Should National Register-eligible properties be identified as the project advances, FTA will apply the adverse effect criteria to determine effects to resources as outlined in the Archaeological Treatment Plan and programmatic agreement. In summary, FTA, in coordination with Sound Transit and in consultation with the State Historic Preservation Officer, Tribes, and other consulting parties will implement terms of the programmatic agreement to address treatment of cultural resources and resolve adverse effects as the project moves forward.

Parks: Sound Transit would work with the City to identify appropriate property for replacement where park property would be permanently acquired, consistent with City of Seattle Ordinance 118477. The ordinance states that park land acquired must be replaced with land of equivalent or better size, value, location, and usefulness. Sound Transit would restore temporarily disturbed parks and recreational resources to pre-project conditions after construction, in cooperation with the resource owner. If agreed to by the City and consistent with Ordinance 118477, Sound Transit would provide funds for purchase of replacement property. Other measures to mitigate affected resources could include financial compensation or park enhancement, where appropriate. Sound Transit would also coordinate with the Washington State Recreation and Conservation Office regarding mitigation for parks and recreation resources they have funded. Up to two parcels in the West Duwamish Greenbelt that could be affected received funding from this office. Sound Transit would coordinate with King County regarding mitigation for impacts to parks acquired using Conservation Futures grant funds. If Junction Plaza Park were displaced (with Option WSJ-3b), an equivalent replacement property would be agreed to with the City to meet grant requirements.

ES.5 Significant and Unavoidable Adverse Impacts

With the avoidance, minimization, and potential mitigation measures described in Chapter 3 and Chapter 4, significant adverse impacts would be avoided or minimized for most alternatives.

Permanent impacts that could be significant and unavoidable for particular West Seattle Link Extension alternatives include the following:

- Displacement of water-dependent businesses on the Duwamish Waterway and ripple effects on other maritime-related businesses (Preferred Alternative DUW-1a, Option DUW-1b, and Alternative DUW-2). Water-dependent uses have unique characteristics or uses that could be difficult to relocate and could require constructing new facilities. Some water-dependent facilities might not be able to be relocated.

- Visual impacts from elevated guideway in the Delridge Segment (Alternative DEL-1a, Option DEL-1b, Alternative DEL-2a, Option DEL-2b, Alternative DEL-3, and Alternative DEL-4).

Some temporary impacts during construction would not be avoidable and could be significant and adverse in some locations. These impacts would include temporary but long-term lane, trail and/or roadway closures, and noise and vibration. Detour routes could reduce the impact of roadway

closures, although delays, congestion, and inconvenience would still occur. Road closures would also require temporary Metro bus diversions. There could be adverse impacts on businesses in the project corridor, especially for businesses adjacent to the alternatives that depend on drive-by traffic. All Duwamish Segment alternatives would require short-term closures of the navigation channel, and netting and scaffolding would temporarily reduce vertical clearance over both waterways.

ES.6 Other Environmental Considerations

ES.6.1. Section 4(f) Resources

Section 4(f) of the United States Department of Transportation Act of 1966 (United States Code Title 49 Section 303[c]) protects publicly owned parks, recreation areas, and wildlife and waterfowl refuges, as well as historic sites. Section 4(f) requires consideration of the following:

- Parks and recreational areas of national, state, or local significance that are both publicly owned and open to the public.
- Wildlife and waterfowl refuges of national, state, or local significance that are publicly owned and open to the public to the extent that public access does not interfere with the primary purpose of the refuge.
- Historic sites of national, state, or local significance in public or private ownership, regardless of whether they are open to the public, that are listed in, or eligible for, the National Register as identified according to Section 106 of the National Historic Preservation Act.
- Archaeological sites in or eligible for inclusion in the National Register, including those discovered during construction, except when the FTA concludes that the archaeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place, and the official(s) with jurisdiction over the Section 4(f) resource have been consulted and have not objected (Section 774.13(b)).

Under Section 4(f), the FTA cannot approve the "use" of a Section 4(f) resource unless it determines that:

- There is no feasible and prudent avoidance alternative to the use of land from the property; and the action includes all possible planning to minimize harm to the property resulting from such use; or
- The use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact on the property.

Potential Section 4(f) resources in the study area are described in Section 3.1, Section 4(f) Resources in the Study Area, of Appendix H, Final Section 4(f) Evaluation, and summarized below. Section 4(f) provides for some exceptions of certain types of uses when specific conditions are met. Otherwise, the use of a Section 4(f) property requires an evaluation of whether there would be a feasible and prudent avoidance alternative.

Section 4.18, Section 4(f) Summary, in Chapter 4 summarizes the use of Section 4(f) resources and consideration of avoidance alternatives. The Build Alternatives represent Sound Transit's best attempt at avoiding and/or minimizing Section 4(f) resources in the densely developed project corridor. The Build Alternatives balance the purpose and need of the project against potential impacts, while providing a range of alternatives for the public to consider and from which FTA and Sound Transit can choose. As design for the project has progressed, Sound Transit continues to look for opportunities to reduce project impacts, including impacts on Section 4(f) resources.

De Minimis Impact

An impact that, after taking into account any measures to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), results in either:

1. A Section 106 finding of no adverse effect on a historic property or no historic properties affected; or
2. A determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f).

Section 4(f) Policy Paper (United States Department of Transportation 2012).

Table ES-5 summarizes the number of Section 4(f) resources within study area by segment.

Table ES-5. Summary of 4(f) Resources in the Study Area

Segment	Number of Park/ Recreational Resources	Number of Historic Resources
SODO	0	7
Duwamish	3	58
Delridge	4	14
West Seattle Junction	3	31
Linear resources spanning multiple segments	Not applicable	1

All alternatives in the SODO and Duwamish segments would result in the use of at least one Section 4(f) resource; therefore, there is no full-length project avoidance alternative for the West Seattle Link Extension. The Final Section 4(f) Evaluation in Appendix H includes a discussion of feasible and prudent avoidance alternatives for all the project alternatives that would result in the individual use of a Section 4(f) resource in each segment. Based on the analysis of potential Section 4(f) resource avoidance alternatives, there are no prudent and feasible avoidance alternatives for the SODO or Duwamish segments, and a Least Harm Analysis has been completed to determine which alternative in the SODO and Duwamish segments causes the least overall harm per Code of Federal Regulations Title 23 Section 774.3(c). Based on an overall assessment of all the seven factors in Code of Federal Regulations Title 23 Section 774.3 presented in Table 3-14 and Table 3-15 of Appendix H, Final Section 4(f) Evaluation, Preferred Option SODO-1c and Alternative SODO-1a are equal least harm alternatives for the SODO Segment, and Preferred Alternative DUW-1a and Option DUW-1b are equal least harm alternatives for the Duwamish Segment per Code of Federal Regulations Title 23 Section 774.3(c)(1).

ES.6.2. Environmental Justice

Appendix G, Environmental Justice, of the Final EIS assesses whether the West Seattle Link Extension alternatives and design options would result in disproportionately high and adverse effects on communities of color and/or low-income populations. It also describes engagement with these populations to encourage their active participation in the planning process and discusses the benefits of the project with these populations. The populations in the study area are not predominately communities of color or low-income and the percentage of both communities of color and low-income people in the study area are mostly lower than the percentage of these populations in the city of Seattle and the Sound Transit Service District as a whole. However, there are census block groups partially in the study area where communities of color and low-income people are present in greater percentages than the city of Seattle and the Sound Transit Service District. Most project impacts would be limited in scope and others would be mitigated through the implementation of effective mitigation measures; see Table 5-2, Summary of Project Impacts and Potential Mitigation, in Appendix G, Environmental Justice. The project would not result in disproportionately high and adverse effects on communities of color and low-income people. Not improving the transit system (the No Build Alternative) would have other adverse social, economic, and environmental effects.

The project would include benefits within and beyond the study area including improved transit access and more efficient and reliable transportation system. The racially and economically diverse communities

of South Delridge, High Point, Westwood, Highland Park, and White Center, south of the project, would benefit from the transit transfer point at the Delridge Station. The Delridge Station would be connected to some of these communities by Metro bus transit routes, including the RapidRide H line, while other communities would be able to transfer at the Avalon or Alaska Junction stations. Communities of color and low-income populations in the study area, as well the neighborhoods south of the study area, would experience improved access to transit benefits along with everyone else in the study area, including a 12- to 15-minute travel time savings, depending on the station and after accounting for transferring from bus to light rail. Reliability of transit service would also increase. These benefits would offset some of the adverse effects, including displacement of public services, social resources, and businesses that would occur with some alternatives. The magnitude of the offsetting benefits of transit support the conclusion that the project would not result in disproportionately high and adverse effects as defined in Executive Order 12898 and the United States Department of Transportation Order 5610.2(a).

Throughout the Alternatives Development process, preparation of the WSBLE Draft EIS, and preparation of this West Seattle Link Extension Final EIS, Sound Transit and the City of Seattle partnered on the Racial Equity Toolkit (RET) process for the project. The RET process is designed as a tool to fulfill the City of Seattle's commitment to its Race and Social Justice Initiative. The City of Seattle's Race and Social Justice Initiative is consistent with federal Executive Order 12898, which is the basis for this environmental justice evaluation.

ES.7 Alternative Development and Public and Agency Involvement

The FTA is relying on the local planning process to inform the environmental review process under NEPA, consistent with federal regulations (Code of Federal Regulations Title 23, Part 450.318) that allow for it, and the Moving Ahead for Progress in the 21st Century Act and the Fixing America's Surface Transportation Act that encourage it.

The West Seattle Link Extension Project is the result of a multi-year planning process. After voter approval in 2016 for funding the Sound Transit 3 Plan, which included the West Seattle Link Extension, Sound Transit continued to build on past planning with an Alternatives Development process to identify alternatives to study in the WSBLE Draft EIS. For the Alternatives Development and WSBLE Draft EIS process, the West Seattle Link Extension was combined with the Ballard Link Extension. The Alternatives Development process began with early scoping under SEPA in February 2018. Sound Transit published an early scoping notice in the SEPA register on February 2, 2018, which initiated early scoping and started a 30-day comment period. Three public open houses and an agency meeting were held during this comment period, as well as an online open house. Comments received from government entities, Tribes, businesses, and community organizations made specific recommendations on alternatives to the Sound Transit 3 Representative Project and issues to study.

Based on feedback received during early scoping, Sound Transit developed an initial set of alternatives. Sound Transit then conducted a three-level screening process that analyzed and compared the alternatives using evaluation criteria developed from the project's preliminary purpose and need. After each screening analysis was complete, the results were presented to the Stakeholder Advisory Group that consisted of transit riders, residents, businesses, major institutional organizations, key stakeholders, and members of the public. The Stakeholder Advisory Group recommended alternatives to carry forward to the next level of screening to the Elected Leadership Group that included elected officials who represent the project corridor and/or the Board. The Elected Leadership Group then made recommendations on which alternatives to study in the next screening level.

There were opportunities for public input between each screening level, which allowed community members to learn more about the alternatives and provide input to the Stakeholder Advisory Group and Elected Leadership Group. Alternatives from the last round of screening were carried forward into the scoping process for the Draft EIS.

Scoping for this EIS was conducted under NEPA and SEPA. The scoping process began with a Notice of Intent to prepare an EIS in the *Federal Register* on February 12, 2019, and a Determination of Significance in the SEPA Register on February 15, 2019. These notices initiated formal scoping and started a required 30-day comment period through March 18, 2019. The FTA and Sound Transit extended this comment period until April 2, 2019, based on requests from the public and the City of Seattle. Three public scoping meetings and a meeting for agencies and Tribes were held during this period, as well as an online open house from February 15 through April 2, 2019. Sound Transit asked for comments on the preliminary purpose and need statement, the alternatives that Sound Transit should evaluate in the Draft EIS, and social, economic, environmental, and transportation issues to evaluate in the Draft EIS.

Following the public scoping period, the Board reviewed the comments received and the alternatives evaluation. In May 2019, the Board approved Motion M2019-51 (Sound Transit Board 2019a), which identified preferred alternatives, preferred alternatives with third-party funding, and other alternatives to study in the Draft EIS. The Board also directed Sound Transit project staff to conduct an initial assessment of additional alternatives suggested during the scoping period to establish whether further detailed study in the Draft EIS was appropriate. Following completion of the initial assessment, the Board reviewed the initial assessment findings and public input. Public outreach during the initial assessment included an online open house, distribution of flyers to residences and businesses, information booths at several fairs and festivals, media briefings, project-wide email updates, as well as personalized emails to community groups to notify them about the opportunity to comment online. In October 2019, the Board approved Motion M2019-104 (Sound Transit Board 2019b), which identified additional alternatives to study in the Draft EIS.

The WSBLE Draft EIS was published on January 28, 2022. Comments were accepted during a 90-day comment period that ended April 28, 2022. In 2022, after publication of the Draft EIS and review of Tribal, Tribal organization, agency, and public comments, including those that suggested new or modified alternatives, the Sound Transit Board confirmed or modified the preferred alternative to be studied in the Final EIS and directed staff to study refinements (Motion M2022-57). See Section ES.3, Alternatives Considered, for a description of modifications made to the alternatives after publication of the WSBLE Draft EIS.

ES.8 Tribal Consultation

Throughout the Alternatives Development process, preparation of the WSBLE Draft EIS, and preparation of the West Seattle Link Extension Final EIS, FTA and Sound Transit have engaged with Tribes with an interest in the project. Consultation with Tribes began on February 2, 2018, when FTA initiated government-to-government consultation. On February 25, 2019, as part of scoping, FTA and Sound Transit invited Tribes to participate in the environmental review process and FTA initiated consultation under Section 106 of the National Historic Preservation Act. FTA and Sound Transit will continue to consult with interested Tribes throughout all phases of the project.

Link light rail train at platform

ES.9 Areas of Controversy and Issues to Be Resolved

Areas of controversy and issues to resolve include:

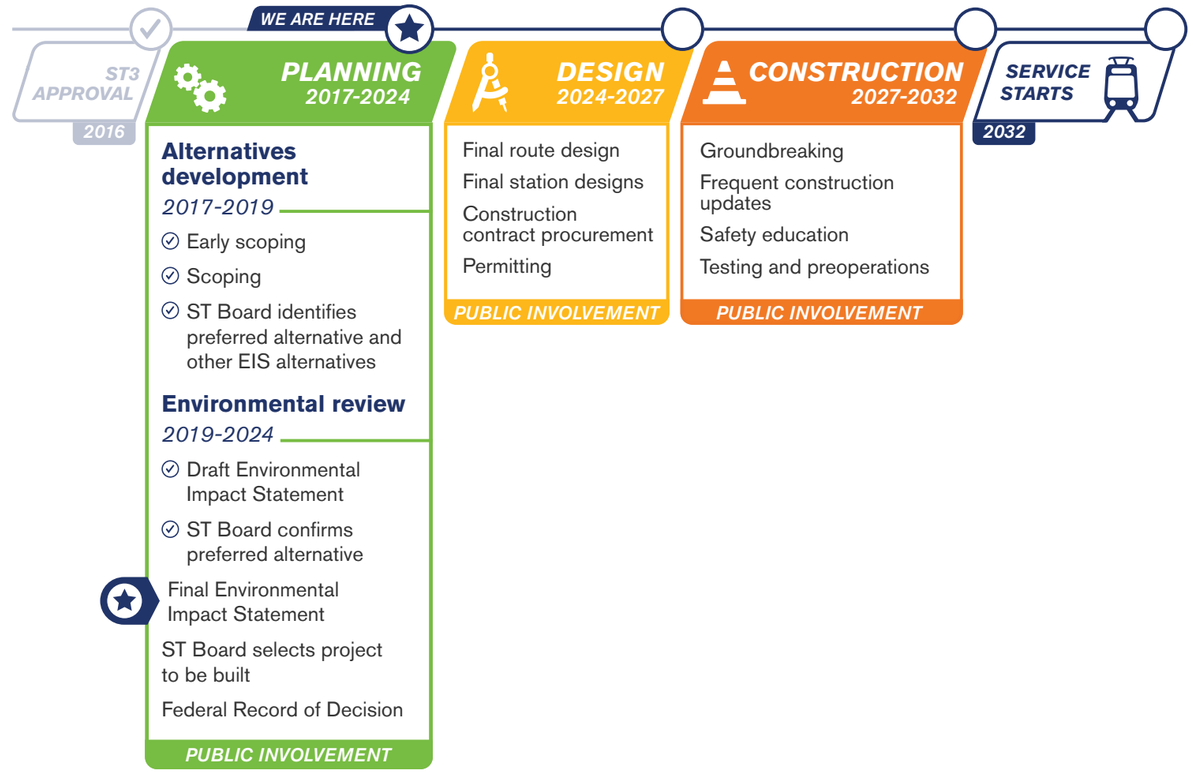
- **Funding:** Based on current cost estimates and revenue projections, the preferred alternatives for the West Seattle Link Extension are anticipated to exceed the assumptions in the realigned financial plan. Sound Transit, the City of Seattle, and King County acknowledge there may be shared responsibility to address the additional cost difference between the final project to be built and the realigned financial plan through either additional funding or cost-savings opportunities. As described in Motion 2023-52, the City of Seattle and King County provided letters to Sound Transit on March 23, 2023, indicating their intent to work with Sound Transit to further analyze costs and funding sources over the next year and develop a funding agreement in advance of the Board action to select a project to be built.
- **Displacement of Public Facilities:** In the SODO Segment, Option SODO-1b and Alternative SODO-2 would displace the SODO United States Postal Service Carrier Annex/Terminal Post Office. Preferred Option SODO-1c and Alternative SODO-1a would avoid permanent impacts (i.e., operation and maintenance) to the United States Postal Service facility and would not require relocation of the facility. If selected as the alternative to be built, station elements for Preferred Option SODO-1c may be shifted as station design advances to enhance station access. However, Preferred Option SODO-1c would be designed to avoid acquisition of the United States Postal Service facility. The existing driveway at the United States Postal Service Carrier Annex/ Terminal Post Office's southern access point would be connected under the new South Lander Street overpass to 4th Avenue South, which then provides access to South Lander Street. If the United States Postal Service facility is displaced, Sound Transit would be responsible for environmental review, design, and construction of a replacement facility. The replacement facility would be designed to meet the United States Postal Service's siting criteria and facility requirements. Impacts of relocating the United States Postal Service facility are yet undefined, and should an alternative that triggers relocation of a United States Postal Service facility move forward, additional environmental review will be conducted to evaluate and disclose the impacts of relocating the facility. Postal operations would be relocated to the replacement facility prior to the project impacting the existing facility.

ES.10 Next Steps

Following publication of this Final EIS, the following steps are expected (see Figure ES-34 for anticipated schedule milestones):

- **Project decision.** After completion of the Final EIS, the Board will consider the alternatives evaluated in the Final EIS and select the project to be built.
- **Federal approval.** FTA will issue a ROD document referred to as the federal ROD, which states FTA's decision on the project, identifies the alternatives considered, and lists mitigation commitments. The issuance of the ROD is required before federal funding or approvals.

Figure ES-34. Project Milestones



At-grade Link light rail train

ES.11 References

City of Seattle. 2016. *City of Seattle Transit Master Plan*. *https://www.seattle.gov/Documents/Departments/SDOT/TransitProgram/TMPSupplmtALL2-16FINAL.pdf*.

City of Seattle. 2018. 2019-2024 Proposed Capital Improvement Program. *http://www.seattle.gov/city-budget-office/capital-improvement-program-archives/2019-2024-proposed-cip*.

Puget Sound Regional Council. 2018a. *The Regional Transportation Plan – 2018*. *https://indd.adobe.com/view/1af394e0-4e37-4982-9155-a2ee1e221b75*. May 31.

Puget Sound Regional Council. 2018b. *Regional Macroeconomic Forecast*. *https://www.psrc.org/our-work/regional-macroeconomic-forecast*.

Puget Sound Regional Council. 2020. *VISION 2050: A Plan for the Central Puget Sound Region*. *https://www.psrc.org/planning-2050/vision-2050. Adopted October 29*.

Sound Transit. 2013. *System Access Policy*. Resolution No. R2013-03 – Attachment A. *https://wsdot.wa.gov/partners/erp/background/System%20Access%20Policy%20Resolution%20R2013-03%20-%20Attachment%20A%20-%20Final.pdf*.

Sound Transit. 2014a. *Regional Transit Long-Range Plan Update Final Supplemental Environmental Impact Statement*. *https://www.soundtransit.org/get-to-know-us/documents-reports/long-range-plan-final-supplemental-environmental-impact-statement*. November.

Sound Transit. 2014b. *Regional Transit Long-Range Plan*. *https://www.soundtransit.org/sites/default/files/documents/2015123_lrpupdate.pdf*. Adopted December 18, 2014.

Sound Transit. 2016. Sound Transit 3, The Regional Transit System Plan for Central Puget Sound. *https://www.soundtransit.org/sites/default/files/project-documents/st3-system-plan-2016.pdf*. Adopted June 23, 2016.

Sound Transit. 2018a *and Ballards Early Scoping Information Report*. February.

Sound Transit. 2018b. *West Seattle and Ballard Link Extensions Early Scoping Report*. April.

Sound Transit. 2018c *and Ballard Link Extensions Level 1 Screening*. https://www.soundtransit.org/sites/default/files/documents/west-seattle-ballard-link-extension-level-1-alternatives-development-and-screening-part-1-20190215.pdf. July.

Sound Transit. 2018d. *West Seattle and Ballard Link Extensions Level 2 Alternatives Development and Screening*. https://www.soundtransit.org/sites/default/files/documents/west-seattle-ballard-link-extension-level-2-alternatives-development-and-screening-part-1-20190215.pdf. October.

Sound Transit. 2018e. *Adopting an Equitable Transit Oriented Development Policy*. Sound Transit Board Resolution No. R2018-10. *https://www.soundtransit.org/st_sharepoint/download/sites/PRDA/FinalRecords/2018/Resolution%20R2018-10.pdf*. Adopted April 26, 2018.

Sound Transit. 2019a. *West Seattle and Ballard Link Extensions Alternatives Development Report*. *https://www.soundtransit.org/sites/default/files/documents/west-seattle-ballard-link-extension-alternatives-development-report-20190215.pdf*. February.

Sound Transit Board (Board). 2019b. *Motion M2019-104: A motion of the Board of the Central Puget Sound Regional Transit Authority recommending additional alternatives for study in the West Seattle and Ballard Link Extensions Draft Environmental Impact Statement*. *https://www.soundtransit.org/st_sharepoint/download/sites/PRDA/FinalRecords/2019/Motion%20M2019-104.pdf*.

Sound Transit. 2019b. *West Seattle and Ballard Link Extensions Scoping Information Report*. *https://www.soundtransit.org/sites/default/files/documents/west-seattle-ballard-link-extension-scoping-information-report-20190215.pdf*. February.

Sound Transit. 2019c. *West Seattle and Ballard Link Extensions Scoping Summary Report*. April.

Sound Transit. 2019d. *West Seattle and Ballard Link Extensions Initial Assessments*. *https://www.soundtransit.org/sites/default/files/documents/west-seattle-ballard-initial-assessment-results-201909.pdf*. September.

Sound Transit. 2019e. *Sustainability Plan – 2019 Update: Building a better tomorrow*. *https://www.soundtransit.org/sites/default/files/documents/2019-sustainability-plan.pdf*. January.

Sound Transit Board (Board). 2019. *Motion M2019-51: Identifying West Seattle and Ballard Link Extension Alternatives for Study in a Draft Environmental Impact Statement*. *https://www.soundtransit.org/st_sharepoint/download/sites/PRDA/ActiveDocuments/Motion%20M2019-51.pdf*

United States Census Bureau. 2019. *Center for Economic Studies*. *https://onthemap.ces.census.gov/*. Accessed October 17, 2019.

soundtransit.org/wslink

westseattlelink@soundtransit.org
or 206-903-7229

Sound Transit | 401 S Jackson St., Seattle, WA 98104-2826
800-201-4900 / TTY: 711 | soundtransit.org